



# **NAVAL POSTGRADUATE SCHOOL**

**MONTEREY, CALIFORNIA**

## **THESIS**

**DETERMINING THE VALUE OF CONTRACTOR  
PERFORMANCE ASSESSMENT REPORTING SYSTEM  
(CPARS) NARRATIVES FOR THE ACQUISITION  
PROCESS**

by

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ACQUISITION PROCESS**

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## **ABSTRACT**

In the last 20 years, the Department of Defense has seen a general reduction in the acquisition workforce yet experienced unprecedented growth in spending for services. The government has increased the level of scrutiny on service contracts highlighting the need to consistently follow policy when documenting contractor performance in the Contractor Performance Assessment Reporting System (CPARS).

This report used statistical analysis to examine 715 Army service contractor performance reports in CPARS in order to answer the following questions: (1) Are government contracting professionals submitting contractor performance narratives in accordance with CPARS guidelines? (2) What is the added value of the contractor performance narratives beyond the value of the objective scores for performance? (3) What is the statistical relationship between the narratives and the objective scores? (4) Do the interview findings contradict, support, or enhance the findings for the three questions above? (5) What conclusions or recommendations can we draw from the answers to the questions above?

The findings revealed inconsistencies between the objective scores and narratives entered into CPARS. This report discusses the findings and concludes with eight recommendations to improve documenting contractor performance.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

AETC	Air Education and Training Command
AMIC	Acquisition Management and Integration Center
AMICC	Army Mission and Installation Contracting Command
COR	contracting officer representative
CPARS	Contractor Performance Assessment Reporting System
DOD	Department of Defense
DON	Department of the Navy
FAR	Federal Acquisition Regulation
GAO	Government Accountability Office
KO	contracting officer
MBA	Master of Business Administration
MICC	Mission Installation Contracting Command
NPS	Naval Postgraduate School
OPM	Office of Personnel Management
PM	program manager
PPI	Past Performance Information
PPIRS	Past Performance Information Retrieval System
PWS	Performance Work Statement
RFP	Request for Proposal
SSA	Source Selection Authority
SOW	statement of work
TO&E	Table of Organization and Equipment

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# **I. INTRODUCTION**

## **A. BACKGROUND**

The purpose of this chapter is to introduce the system designated by the Department of Defense (DOD) for reporting contractor past performance, called Contractor Performance Assessment Reporting System (CPARS). The DOD obligated approximately \$360 billion in fiscal year 2012 for contracts for supplies and services (Government Accountability Office [GAO], 2013). In order to support best practices for government acquisition, the Office of Federal Procurement Policy (OFPP) directs in Federal Acquisition Regulation (FAR) Part 42 that federal contracting agencies shall use CPARS as their primary tool for documenting contractor past performance.

This MBA project focuses on Army services contracts, specifically, the narrative section of contractor performance assessment reports, and advances the research conducted by Hart, Stover, and Wilhite (2013), which was focused on the CPARS contractor report cards. This research project generated a local database of 715 Army service contracts that were used to correlate the success of contracts based on objective scores of six characteristics.

This is the eighth research project in a series of MBA projects relating to services acquisitions. Apte, Dixon, and Rendon are collaborating on research that focuses on the value of CPARS narratives, the correlation of narratives to objective scores, and the narratives' effect upon the source selection process.

Government contracting professionals use contractor past performance information (PPI) during source selection and contract administration. The FAR requires that contracting officers consider contractor past performance as one evaluation factor for awarding contracts. Contractor PPI can be the factor that determines whether a particular contractor will be awarded government business.

## **B. PROBLEM STATEMENT**

CPARS is a system that was designed to be used by contracting professionals for submitting and retrieving contractor past performance information. There have been many discrepancies and failures specified in recent Government Accountability Office (GAO) reports with the utilization of CPARS. Government contracting agencies are failing to properly document contractor PPI within the schedule requirements mandated by the OFPP. In a 2009 report, data analyzed from 2007 showed that DOD contracting components completed required contractor past performance report cards less than half of the time (GAO, 2009). Subsequently, the DOD increased its focus on training and education for contracting professionals, which led to an increase in contractor performance assessments being completed and submitted to the Past Performance Information Retrieval System (PPIRS). In the last published report during the research period of this project (GAO, 2013), the GAO noted significant gains in completion rates. Fifty-six percent of required reports were completed in 2011, while 74% were completed in 2013. However, according to the same report, over half of these reports were submitted late. In addition, many CPARS report cards contain narratives that are either insufficiently detailed or conflict with their associated objective scores. Late reports lacking sufficient accurate information provide less-than-optimal information to the contracting professionals who rely on these report cards for source selection and contract administration purposes.

## **C. PURPOSE**

Government contracting professionals submit to CPARS information on contractors related to their contract performance. This information is in the form of objective scores in five categories: quality, schedule, cost control, business relations, and management of key personnel. In addition to these five categories, there is a specific contractor evaluation section in which the government evaluator writes a descriptive narrative of the contractor's performance.

The purpose of this research is to attempt to determine the value of contractor performance assessment report narratives for services contracts by comparing the relationships between narratives and objective scores in order to recommend improvements to the CPARS contractor performance information documentation process. These recommendations regarding the process aim to improve the CPARS report card product, which should lead to greater and more effective utilization of the CPARS system for source selection and contract administration purposes.

#### **D. RESEARCH QUESTIONS**

The primary question addressed by this research project is as follows: Does the CPARS report card written narrative section provide value to the contractor performance evaluation process? This research focuses on five research questions that explore the nature of CPARS narratives:

1. To what degree are government contracting professionals submitting contractor performance narratives to CPARS in accordance with the guidelines provided in the CPARS user's manual?
2. What is the added value of the contractor performance narratives beyond the value of the objective scores for performance?
3. What is the statistical relationship between the sentiment contained in the narratives and the objective scores for contractor evaluations?
4. To what degree do the interview findings contradict, support, or enhance the findings for the three research questions above?
5. What conclusions or recommendations can we draw from the answers to the research questions above?

## **E. METHODOLOGY**

This research examines the value of CPARS report card narratives for service contracts as they relate to their associated objective scores. The methodology includes a literature review, data analysis (including both sentiment and statistical analysis), and interviews with government agency contracting professionals.

The literature review was conducted for the purpose of examining and considering knowledge available from the existing body of literature on the subjects of federal contracting and government contractor performance. The GAO and OFPP have released several studies and memoranda on the subject of contractor past performance as it relates to the government contracting process. This research was based in large part upon these documents and previous research performed by Hart, Stover, and Wilhite (2013) that explored the drivers of successful service contracts. Building on their research, this project conducted a review of literature about the service contract management process and the Contractor Performance Assessment Reporting System.

The first phase of data analysis performed was a sentiment analysis of 715 Army service contract CPARS report card narratives. The CPAR Quality Checklist was used as a basis for developing the criteria for the categories and values for the analysis (*CPAR Quality Checklist*, n.d.). Narratives were assigned several scores relating to their quality, robustness, compliance with directions in the CPAR Quality Checklist, and their value and content compared to their related objective scores from the CPARS report cards.

The second phase of data analysis included a statistical analysis of the relationship between the scores provided by the sentiment analysis and their associated objective scores. This analysis looked at correlating relationships between the various sentiment scores and the various objective scores for the same CPARS report to find meaningful relationships between them and to reveal the extent of the value of the narratives.

In support of the data analysis, interviews with contracting professionals from two DOD contracting agencies were conducted. These interviews consisted of a series of questions asking the subjects about how they use and to what extent they value CPARS and other sources of contractor past performance information and to what extent they value the narratives compared to the performance objective scores.

## **F. BENEFITS AND LIMITATIONS**

The purpose of this research is to attempt to determine the value of contractor performance assessment report narratives for services contracts by comparing the relationships between narratives and objective scores. Potential benefits to this research include a better understanding of the value of the CPARS narratives and the extent to which DOD contracting professionals value them relative to other sources of contractor past performance information. This study will provide information based on data indicating how closely written narratives correlate to their associated objective scores. It will also show how well DOD approving officials and the individuals contributing to the narratives comply with the directions for completing a CPARS narrative as instructed in the CPAR Quality Checklist (*CPAR Quality Checklist*, n.d.).

There are clearly identifiable limitations to the research being conducted. First, this research project is limited to the 715 Army service contracts analyzed in a previous Naval Postgraduate School (NPS) MBA project (Hart et al., 2013). The selection criteria for those 715 contracts was limited by Army service contracts, “contracts only submitted by Mission Installation Contracting Commands (MICCs), and contracts from only five MICC offices” (from Hart et al., 2013, p. 5).

The next limitation is the dollar threshold for reporting contractor performance information in CPARS. DOD CPARS policy provides different dollar thresholds for mandatory reporting of contractor past performance (PPI) information. Service contracts must report contractor PPI starting at dollar amounts greater than \$1,000,000 (Department of the Navy [DON], 1997). This means contractor PPI for services contracts may not be reported if dollar amounts are below \$1 million. This limits the research database to either service contracts above \$1 million or service contracts below the threshold that DOD contracting professionals chose to enter into CPARS.

Another limitation of this research is the fact that DOD contracting professionals may not enter PPI into CPARS even though it is required. As of the completion of this project, the most recent report (GAO, 2013) shows this lack of performance with 56% and 74% of CPARS reports completed in 2011 and 2013, respectively. These limitations are discussed further in later chapters.

## **G. SCOPE AND ORGANIZATION OF RESEARCH**

This research report consists of five chapters organized in the following manner. Chapter I contains background information, a problem statement, the purpose of the research project, research questions, the methodology of research, the benefits and limitations of the project, and the scope and organization of the research project. Chapter II is a literature review that provides an overview of the DOD acquisition process for service contracts, the contractor performance assessment reporting system, the increase in scrutiny of federal contracting agencies, and previous studies that led us to this research. Chapter III contains the methodology for how the research was performed, organized, and analyzed. This chapter also discusses the purpose and scope of interview questions posed to DOD contracting professionals. Chapter IV provides an analysis of the data and presents the answers to the research questions. Chapter V summarizes the research project, provides conclusions, and addresses potential areas for additional research.

## **H. SUMMARY**

This chapter provided the background information leading up to the research project, a problem statement, the purpose of the research project, research questions, the research methodology used to analyze the data, benefits and limitations of the research, and the scope and organization of the overall project. Chapter II provides the literature review of the DOD acquisition services contracting process, the CPARS evaluation system, and previous studies conducted by NPS in relation to services contracts.

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## **II. LITERATURE REVIEW**

### **A. INTRODUCTION**

The purpose of this chapter is to provide an introduction to the DOD acquisition process for services, with a focus on Army services contracts. This review attempts to familiarize the reader with the necessary information to understand the contracting structure, contracting terms, roles, and responsibilities of the acquisition team, and the system that the DOD has implemented for documenting and retrieving contractor past performance information, called the Contractor Performance Assessment Reporting System (CPARS). This chapter provides a discussion about the purpose of CPARS as well as current issues associated with CPARS. The chapter includes a look at reports submitted by a number of government authorities that point out the successes and failings of various government contracting agencies in complying with laws and directives specifying how and to what extent they are to utilize CPARS for documenting contractor past performance information.

### **B. THE DOD ACQUISITION PROCESS FOR SERVICE CONTRACTS**

To understand the DOD acquisition process, the reader first needs to understand what the term *acquisition* means. The Federal Acquisition Regulation (FAR) defines the term acquisition as follows:

acquiring by contract with appropriated funds of supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract. (FAR, 2014, Part 2.101b)

The basic definition is that the government has a need and fulfills that need by purchasing a product or service through a defined process using a set of rules.

All DOD acquisitions—services and non-services alike—begin the contracting process with the same fundamental step: identify a bona fide need or requirement. The customer, usually an organization or an entity within an organization, identifies a product or service that is essential for that organization to complete its mission or function. The customer must be specific when describing the agency need for the contracting officials to accurately identify the requirement and begin the contracting process. According to FAR Part 11, Describing Agency Needs, the customer must, to the maximum extent possible, adhere to the following:

- (i) State requirements with respect to an acquisition of supplies or services in terms of –

- (A) Functions to be performed;

- (B) Performance required; or

- (C) Essential physical characteristics. (from FAR, 2014, Part 11.002)

An example of a bona fide need is as follows. The Army Mission and Installation Contracting Command (AMICC) received a request from a customer to purchase janitorial services. The customer has funding available in the current fiscal year and is requesting 12 months of services for one building with a requested contract start date two months from the submission of the requirement. The services consist of the following tasks: sweep floors daily, mop floors with soap and water one time per week, wax floors one time per quarter, remove trash from garbage bins every Thursday, clean and sanitize bathrooms daily, and other specified tasks. The service requirement is clearly defined with funding available to obligate expenses and provides the contracting official with sufficient information to begin the acquisition process, and so a bona fide need is apparent.

The following request for maintenance services would be rejected due to its not meeting the bona fide need requirement. The AMICC receives a request for M1A1 Abrams tank maintenance services from Fort Drum's 10th Mountain Division. This request would be denied as the 10th Mountain does not have tanks on its Table of Organization and Equipment (TO&E). A unit cannot request maintenance services for equipment it does not have. Alternatively, a request by the U.S. Army Armor School at Fort Knox might have a bona fide need for tank maintenance services because they train Army and Marine Corps personnel on the Abrams tank.

Once a bona fide need has been identified, the service acquisition process can begin. The service acquisition plan is a comprehensive strategy that identifies the relationship between the plan's phases and the work to be performed, lists the milestones to be completed, and provides the overall approach that management will follow to mitigate risk while meeting the service requirements (Neuman, 2013b).

The service acquisition process can be identified by its three phases: Plan, Develop, and Execute. These phases break down into seven distinct processes that build upon the previous process. As Beers (2011) wrote, "The Planning phase, as depicted in Steps 1, 2, and 3, lays the foundation for the services acquisition" (from Beers, 2011, p. 56). According to Beers (2011), "During the development phase—Steps 4 and 5—a requirements roadmap process is used to define performance objectives and standards, allowable variations, and method of performance assessment. In the execution phase—Steps 6 and 7—the team puts all the customer's planning and development efforts into action" (from Beers, 2011, p. 57). Figure 1 explains the seven stages of the service acquisition process.

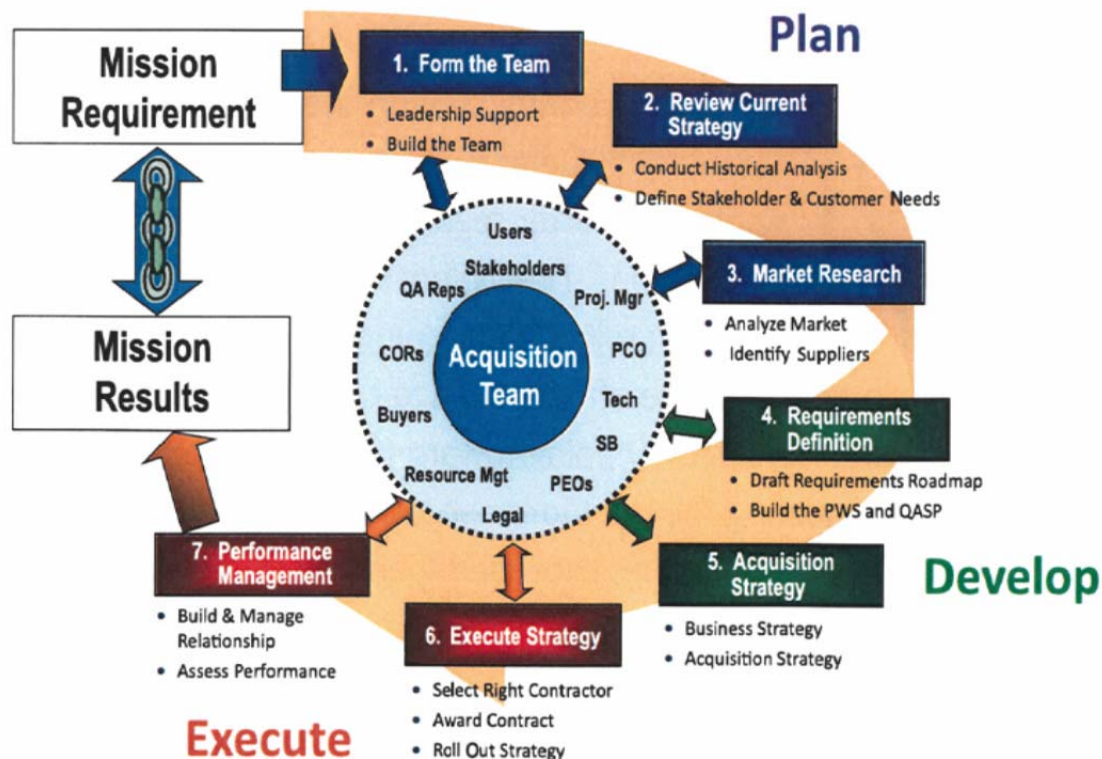


Figure 1. The Services Acquisition Plan (from Beers, 2011, p. 56)

## Phase 1: Plan

The first phase of the services acquisition process is the planning phase. This phase is extremely important as it is the foundation for the service acquisition. The planning phase contains three steps: (1) form the team, (2) review current strategy, and (3) market research.

### Step 1: Form the Team

During Step 1 of this phase, the agency head is responsible for designating who will be a member of the acquisition team, provide them with the guidance on how to proceed, and ensuring that the plan complies with FAR requirements (FAR, 2014, Part 7.103[i]). The acquisition team consists of anyone who will be responsible for significant portions of the service acquisition throughout its life cycle (FAR, 2014, Part 7.102[b]). No single person has the requisite knowledge, technical proficiency, time, or resources to perform all the

functions necessary to plan, source, award and administer a service contract, but an acquisition team made up of experts in functional areas can. Acquisition team members can include, but are not limited to, the program manager, contracting officer, contracting officer's representative (COR), and others with expert functional area knowledge like finance, legal, engineering, small business administration, quality assurance, logisticians and the customer/end user (DOD, 2012).

**Program Manager:** The program manager (PM) is the single person tasked with the responsibility to manage the acquisition team while balancing the acquisition cost, schedule, and performance for that program (Neuman, 2013a). PMs perform essential functions such as attending program reviews, defending the program or fighting for additional funding, fighting requirements creep, and coordinating with senior DOD and congressional staffers to ensure compliance with statutory requirements and congressional intent. Given the importance of the PM position, it is unfortunate that previous research by Apte and Rendon (2007) found that “in many service acquisitions, a project manager or project team is not assigned and the contracting officer assumes the responsibilities of the project manager or project team leader” (from Hart et al., 2013, p. 10).

**Contracting Officer:** The contracting officer (KO), as defined by Neuman (2013b), is:

responsible for providing contracting support required for meeting the project's cost, schedule, and performance objectives while in compliance with the statutory requirements and agency regulations ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States Government in its contractual relationships. (Neuman, 2013b, p. 34).

Basically, the KO works to support the PM to meet the program's goals, but the KO must adhere to all laws, regulations, and agency policies.

Contracting officers have specific responsibilities defined by regulations. According to FAR 1.602-2, a contracting officer shall:

- (a) Ensure that the requirements of 1.602-1(b) have been met, and that sufficient funds are available for obligation;
- (b) Ensure that contractors receive impartial, fair, and equitable treatment;
- (c) Request and consider the advice of specialists in audit, law, engineering, information security, transportation, and other fields as appropriate;
- (d) Designate and authorize, in writing and in accordance with agency procedures, a contracting officer's representative (COR) on all contracts and orders other than those that are firm-fixed price, and for firm-fixed-price contracts and orders as appropriate, unless the contracting officer retains and executes the COR duties. (from FAR, 2014, Part 1.602-2)

Army contracting officials can either be civilian employees authorized to serve in 1102 positions (Office of Personnel Management, 1983), or military personnel serving in Functional Area 97A, Contracting and Industrial Management Officer (Jones, 2007), or Military Occupational Specialty 51C, Acquisition, Logistics, and Technology Contracting Non-Commissioned Officer (U.S. Army, 2011).

In the past decade, Army acquisition officials have increasingly operated in joint environments. This has required Army contracting personnel to interact with contracting specialists from the other services and other governmental agencies. While all DOD personnel operate under the same FAR and Defense Federal Acquisition Regulation Supplement (DFA`RS), each DOD organization has its own supplement to the FAR, and each organization outside the DOD may operate under different guidance promulgated by its parent organization (e.g., Army FAR Supplement [AFARS], Air Force FAR Supplement [AFFARS], Navy Marine Corps Acquisition Regulation Supplement [NMCARS], Department of State Acquisition Regulation [DOSAR], and Department of Veterans Affairs Acquisition Regulation [VAAR]; FAR, 2014, Part 1.301).

**Contracting Officer Representative:** The contracting officer representative (COR) is not a contracting officer, nor does he/she hold any

contracting authority. The FAR specifically states that a COR “has no authority to make any commitments or changes that affect price, quality, quantity, delivery, or other terms and conditions of the contract nor in any way direct the contractor or its subcontractors to operate in conflict with the contract terms and conditions” (from FAR, 2014, Part 1.602-2[d][5]). The function of a COR is to be the eyes and ears of the KO. Ideally, the COR would be a technical expert and assist with monitoring contractor performance on a specific contract. In practice, it is more likely that a COR will not have a high degree of technical expertise in the field of monitoring contractor performance.

**Functional Area Expert:** Functional area experts have a specific set of skills and provide the acquisition team with a wide range of talent that they can tailor to each service contract. They provide an essential service by reducing the workload and technical knowledge required by the contracting officer. Functional area experts include, but are not limited to, financial managers who keep the project on budget, price/cost estimators who analyze the price/cost of a project, legal officers, engineers who have technical knowledge, auditors, small business/competition advocates, quality assurance representatives, information technology advisors, and logisticians (Beers, 2011). Service contracts can range from a simple janitorial contract to highly complex multi-year helicopter maintenance and repair services that are performed on multiple bases in the continental United States; overseas bases in Europe, Africa, and Korea; and warzones like Afghanistan and Iraq.

## **Step 2: Review Current Strategy**

Step 2 begins with the acquisition team creating a baseline and then analyzing the current service strategy (Beers, 2011). This consists of looking at historical data, identifying problems, projecting any type of modification to the mission, and getting the customer/end user to define the key performance outcomes that they expect from this contract. This is by far the most important part of Step 2. The customer must be able to define what they expect this

contract to accomplish as there can be differences between what is said and what is understood.

For example, a customer requested a janitorial cleaning services contract to cover portable toilets at a specific location. The contracting officer understands that this contract is to cover cleaning the portable toilets and removing waste, but goes back to the customer to define key requirements to make sure everyone has the same view of the performance requirements. The customer states that they want the vendor to check the level of toilet paper in each portable toilet and resupply each unit as necessary. The customer also requires that the services contract cover the removing of waste water and trash from the hand washing station next to the portable toilets and the resupplying of the hand sanitizer solution and paper towels at that station. What the customer originally stated as the requirement and what he/she thought he/she was getting was different from what the contracting officer understood from the original request. This is why it is important for the customer and acquisition team to define the requirements and expected performance outcomes.

### **Step 3: Market Research**

As Beers (2011) wrote, “The team analyzes the marketplace to assess current technology and business practices, competition and small business opportunities, and existing and potential new sources of providing the service; the team then determines if commercial buying practices can be used” (from Beers, 2011, p. 56). Ideally, the customer or end-user would have conducted market research prior to giving the requirements to the contracting command. Market research can provide the customer and the contracting officer with ideas about the types of services required, possible vendors to provide those services, estimated pricing and cost data, and help defining what the customer really needs. One of the main reasons for doing market research is to determine whether a service is commercially available or is a government-unique service. Commercial services tend to be more defined and have more vendors to



compete for government business. Government-unique services can be more complicated and require more effort to define the requirement.

## **Phase 2: Develop**

The second phase of the services acquisition process is the Development phase. This phase consists of Step 4, Requirements Definition, and Step 5, Acquisition Strategy, in which the acquisition team develops the overall plan to procure the services. The requirements and performance outcomes that the customer provided are examined and refined further. Then the team determines the appropriate path to contract for the required services.

### **Step 4: Requirements Definition**

This step allows the acquisition team to define the performance objectives, determine an acceptable variation, and choose the method of measuring performance (Beers, 2011). This process leads the team to develop the Performance Work Statement (PWS). The PWS should tie directly to the requirements and is used to define how the vendor will be evaluated with regard to CPARS objective scores.

The following is an example of defining requirements. The Army Mission and Installation Contracting Command (AMICC) received a request from a customer to purchase aircraft maintenance services. This is poorly defined because there are many different types of aircraft that require different types of maintenance. This could mean ordering spare parts, engine repair, repair of proprietary hardware, repair of electrical or electronic systems, or some other type of maintenance. The requirement does not say where the maintenance services will be performed. When does the customer need the services? How many aircraft will be serviced or how much maintenance service does the customer require? The requirement provided to the contracting official is very vague, which does not allow him/her to determine what the customer wants or needs. The contracting official will need to discuss the requirements with the customer to define the requirements.

### **Step 5: Acquisition Strategy**

This step is designed to select the contract type that is the most beneficial to the government to mitigate risk, provide for the proper amount of incentive to the vendor to complete the contract objectives, and select between lowest price and tradeoffs where the best value may be a higher priced solution (Beers, 2011). The requirements will tell the vendor what the performance metrics are, not the specific methods for how the vendor will complete the job. The customer and acquisition team care only about the performance outcomes, not how the vendor accomplishes the task. This allows the vendor to be innovative about how they design a solution.

### **Phase 3: Execute**

The third phase of the services acquisition plan is the Execution phase. This phase consists of Step 6, Execute Strategy, and Step 7, Performance Management, which pulls together everything that the customer and acquisition team have developed up to this point and culminates in the requirement going out to industry in the form of a request for proposals (RFP). The final part of Phase 3 is concerned with contract performance and administration processes designed to close out or terminate a contract.

### **Step 6: Execute Strategy**

This step involves the creation of synopsis and solicitation documents that “formally communicates to industry the customer’s requirements and business plan” (from Beers, 2011, p. 57). The acquisition team may release a draft RFP to solicit industry feedback on the feasibility of the requirements and to get a feel for industry interest in performing this contract. Once the requirement is ready for release to the public, vendors will review the documents and create a solution to meet those objectives. The acquisition team may establish a competitive range to limit the number of applicants to an economical, efficient, and manageable level as their time and resources are limited and cannot process 100, 50, or even 10 proposals if the requirements are complex.

The acquisition team will evaluate each proposal against the requirements specified in the RFP and the standards and performance measures included in the Performance Work Statement (PWS). The team will not evaluate proposals against each other. The acquisition team will recommend to the source selection authority (SSA) the proposal that best meets the RFP requirements. The final decision on selecting the best proposal rests with the SSA. The SSA may be one or more levels above the contracting officer. The contracting officer will then inform all the non-selects of the results. If there is some discrepancy with the contract award, the non-selects will have 10 days from the contract award to protest the award. At this point, the acquisition team will move into the administrative or management step.

### **Step 7: Performance Management**

As Beers (2011) observed, this step “involves two key areas: administering contract requirements, such as invoicing and payments, and managing the relationships and expectations of both the contractor and customers in meeting the terms of the contract and achieving the required mission performance results” (from Beers, 2011, p. 57). Many in the contracting world argue that this step is where the real work begins.

Contractor performance on the contract must be monitored, which is where the COR aids the contracting officer. The COR will communicate with the contractor and contracting officer regularly to provide progress reports and help solve problems as they arise. Contracts can be terminated for default (T4D), terminated for convenience (T4C) of the government, or closed out upon successful completion. While contracts should be closed out within six months, there are situations in which contracts remain open for decades while the government and contractor disagree over payments, terms and conditions, and settlement of any court appeals. An example is Boeing determining what the final labor rate, overhead rate, and time and material rates are for a cost reimbursement type contract. Boeing must wait until all other product lines have provided data so the company can break down those costs to the relevant

contract and develop these rates for reimbursement. The government will then review those costs for accuracy which can take up to a year or more on complex contracts. If there is a discrepancy, it can go to the contract agency head, the GAO, or the Armed Services Board of Contract Appeals, which can add years to the case. The contract cannot be closed out until every last discrepancy is resolved, even if it's as simple as a \$0.01 difference between the contracted price and the contractor invoice.

Contractor performance must be monitored regularly to comply with contract administration requirements. Contract administration can cover short periods of time or govern multiple periods, depending on the type of contract. A contract with a short period of performance may see the source selection, contract award, contract performance, and closed out periods all occur within the same fiscal year. In this instance, a contracting officer would provide the CPARS with an evaluation of that contractor's performance on that particular contract based upon the evaluation criteria set forth in the contract. A contract that crosses fiscal years, has multiple option years of the same contract, or is a multi-year contract (e.g., ship building, military construction), may require a CPARS evaluation report on the contractor's performance on an annual or more regularly scheduled basis and a final CPARS evaluation when the contract closes out. Military personnel move on a regular basis so the PM, KO, or COR who starts on a contract source selection may be different from the PM, KO, or COR who administers the contract, who might differ from the PM, KO, or COR who closes out the contract. Diligent monitoring of contractor performance is the only way to accurately evaluate and rate a contractor in CPARS over the life of the contract.

Accurate CPARS report cards, objective scores, and descriptive narratives are important because they are used during the government's source selection process. As described in Figure 1, the Services Acquisition Plan, the government will execute the acquisition strategy by selecting a contractor and monitoring performance. Contractor past performance can play a significant role in determining eligibility and competitiveness in the source selection process.

Contractor past performance can demonstrate, but is not limited to, contractor responsiveness to customer needs, reliability, contractor's past performance on relevant contracts, government/contractor business relationships, disqualifying conditions (debarment, suspension, termination for default, failure to meet standards), contractor/subcontractor business relationships, and factors to mitigate potential risk. Given the role that past performance information plays in the source selection process, it is important to review the CPARS system. The next section provides an overview of CPARS, the narrative and issues surrounding CPARS information.

### **C. CONTRACTOR PERFORMANCE ASSESSMENT REPORTING SYSTEM**

The CPARS is used by all federal agencies to evaluate contractor performance. The purpose behind this system is to give federal procurement personnel a way to assess “a contractor's performance, both positive and negative, and provide a record on a given contract during a specified period of time” (from Hart et al., 2013, p. 20). CPARS report cards are segmented into five distinct business sectors: Systems, Services, Operations Support, Fuels, and Information Technology (DON, 1997). The key business sector “Services” can be subdivided into Professional/Technical & Management Support Services, Repair & Overhaul, and Installation Services. The excerpt below is from the CPARS manual and describes the types of contracts that are considered “Service” contracts.

**Services:** Generally, all contracted services except those related to “Science & Technology,” “Construction & Architect—Engineering Services,” and “Health Care.”

**Professional/Technical & Management Support Services:** Includes all consultant services—those related to scientific and technical matters (e.g., engineering, computer software engineering and development), as well as those related to organizational structure, human relations, etc. Includes office administrative support services (e.g., any basic or applied research that will result in new or original works, concepts, or applications, but does not

include contract advice on the feasibility of such research, as well as evaluation of research results.

**Repair & Overhaul:** Services related to the physical repair and overhaul of aircraft ground vehicles, etc., and any associated subsystems or components. Includes condition evaluations of individual items received for repair or overhaul, but does not include evaluations of the feasibility or the benefits of the overall project. Does not include ship repair and overhaul which is included under the Systems sub-sector on Shipbuilding.

**Installation Services:** Includes services for grounds maintenance (grass cutting, shrubbery maintenance or replacement, etc.). Includes services related to cleaning, painting, and making minor repairs to buildings and utilities services, etc. Includes contracted security and guard services. Includes installation and maintenance of fencing. Includes minor electrical repairs (e.g., replacing outlets, changing light bulbs, etc.). Includes minor road surface repairs (patching cracks, filling in potholes, etc.). Includes relocation of individual telephone lines and connections. Includes snow removal. (But, see also “Construction & Architect/Engineering Services” and Information Technology” for the services covered by those business areas.). (from DON, 1997, p. A1-2)

The Services Business Sector is a very diverse collection of services. Contracting professionals may not be familiar or experienced with such a wide array of contracted services so it is important for CORs, KOs, PMs, and the contract management team to work together to ensure that the contractor’s performance is clearly and accurately recorded in the CPARS report card.

Past performance information entered into CPARS must be accurate and timely as it is primarily used by source selection officials to award or not award a contract based on a contractor’s strengths and weaknesses during Step 6, the Execute Strategy phase of the Services Acquisition Plan. As explained in the CPARS manual, “The value of CPARS to a future source selection team is inextricably linked to the care the program manager takes in preparing a quality narrative to accompany the CPAR scores” (from DON, 1997, p. 1).

The CPARS evaluation assesses at least five distinct areas of contractor performance supported by objective data presented in Block 20 (DON, 1997).

These areas are Quality of Product/Service, Schedule, Cost Control, Business Relations, and Management of Key Personnel. Objective scores are used by the acquisition team to rate contractor performance in these five areas. There are five possible scores for each of these five areas. The five possible scores are unsatisfactory, marginal, satisfactory, very good, and exceptional (also shown in Table 3).

CPARS includes a variance assessment that assesses the variance between current costs and schedules and government estimates. Scoring for Block 18 and 19 must be in accordance with Appendix B, SPECIFIC EXAMPLES OF NARRATIVE STATEMENTS TO AVOID FROM THE CPAR QUALITY CHECKLIST (N.D.) and Evaluation Ratings Definitions (DOD, 2011, p A2-1), and is described in detail in Chapter III—Research Methodology.

Finally, CPARS includes a program manager narrative that is a statement of the facts regarding the contractor's performance on a particular contract. The program manager is responsible for generation and content of the narrative as the PM must sign and date this form prior to sending it to the KO for review (DON, 1997). The narrative comments in Block 20 should directly trace back to the corresponding objective scores in Blocks 18 and 19 of the CPARS report card (DON, 1997).

Consistent and objective evaluations of contractor performance are essential, which is why a series of checks and balances were designed within the CPARS process (Hart et al., 2013). As stated in the CPASRS manual, "Each assessment must be based on objective facts and be supportable by program and contract management data, such as cost performance reports, customer comments, quality reviews, technical interchange meetings, financial solvency assessments, and functional performance evaluations" (from DON, 1997, p. 2).

Before the performance assessment can be finalized, it must be forwarded to the contractor for review and comment. This ensures the past performance information report card is finalized only after the contractor has the opportunity to

provide feedback to the assessing official. The contractor is not required to respond but must have the opportunity to provide inputs to the CPARS evaluation. Only after this has happened can the approving official finalize the report. The approving official is someone in a position at least one level above the program manager to help ensure impartiality and objectivity (DON, 1997). Even with these checks and balances in place, the Army and the DOD as a whole have had below-standards records for CPARS compliance. Table 1 shows the compliance rates for the Army and the larger DOD with a 49% and 56% in 2011 but a much improved compliance rate of 71% and 74%, respectively, for 2013 (GAO, 2013, p. 9).

<b>DOD Component</b>	Compliance Rate as of		
	<b>2011-Oct-03</b>	<b>2012-Sep-28</b>	<b>2013-Apr-01</b>
Air Force	82%	82%	80%
Navy	66%	69%	72%
Army	49%	60%	73%
Other DOD	32%	61%	71%
<b>Total DOD</b>	<b>56%</b>	<b>66%</b>	<b>74%</b>

Table 1. Percentage of Required Assessments Submitted to the Past Performance Information Retrieval System (PRIRS)  
(from GAO, 2013, p. 9)

The following section addresses several issues identified by the GAO and the Office of Federal Procurement Policy (OFPP) in the area of documenting contractor past performance information in CPARS and their steps to correct and improve the process.

#### **D. INCREASED SCRUTINY OF FEDERAL CONTRACTING AGENCIES**

An increased focus on contractor past performance began in 1994 with the Federal Acquisition Streamlining Act (FASA), in which Congress directed that government contracting agencies should use contractor past performance information as one of the award decision evaluation factors. As a result of the FASA, the FAR was updated to reflect this new requirement, and the OFPP began releasing guides and memoranda for the purpose of instructing federal



contracting professionals in the best practices for collecting, submitting, and utilizing contractor past performance information.

One of the biggest obstacles in the way of achieving more reliably widespread and frequent use of contractor past performance information in the contracting process was the lack of a centralized reporting system. In 2002, the DOD directed that the PPIRS, a web-enabled contractor past performance information database and retrieval tool, was its single authorized retrieval system for past performance information. However, a GAO report from 2009 revealed that “PPIRS data for fiscal years 2006 and 2007 indicates that only a small percentage of contracts had a documented performance assessment” (from GAO, 2009, Executive Summary). Table 2 shows the disparity between the total numbers of contracts requiring assessments versus contracts with an actual completed assessment. In 2007, the Air Force led the way with 47%. In 2009, the FAR began requiring all federal agencies to submit all of their contractor performance evaluations to PPIRS.

<b>Estimated Contracts Requiring an Assessment That Had an Assessment In Fiscal Year 2007</b>			
<b>Department/agency</b>	<b>Estimated contracts requiring an assessment</b>	<b>Contracts with an assessment</b>	<b>Percent</b>
Air Force	2,795	1,300	47
Navy	3,879	1,622	42
Army	6,145	1,971	32
Other DOD	1,408	303	22
Homeland Security	4,131	535	13
NASA	3,706	1,093	29
Energy	840	183	22
<b>Total percentage</b>	<b>22,904</b>	<b>7,007</b>	<b>31</b>

Source: GAO analysis of data from DOD, FPDS-NG, and PPIRS.

Table 2. DOD CPARS Requirement versus Actual Reporting  
(from GAO, 2009, p. 12)

In 2007, the GAO released a report, *Use of Contractor Performance Information*, detailing its study of how contractor past performance information

may be considered in the contracting process and what issues government contracting agencies have encountered with the use of this information. The report identifies many of the complexities that go into the process of evaluating contractor past performance and how these complexities have affected GAO protest decisions (GAO, 2007).

Contractor past performance information is fundamentally important to the contracting process from the beginning during the pre-award period through the end of contract performance. The GAO report looked at several ways in which government contracting finds use in considering contractor past performance. These include source selection, responsibility determinations, surveillance of performance under the current contract, and suspension and debarment (GAO, 2007).

A GAO report from 2009 revealed the results of a review of 62 government contract solicitations from fiscal years 2007 and 2008 for which contractors' past performance information was considered (GAO, 2009). The researchers also interviewed 121 contracting officials, asking them about how their agencies utilize contractor past performance information. The GAO study showed that although contractor past performance information was being reviewed, to include the use of the PPIRS system, that "factors other than past performance, such as technical approach or cost, were the primary factors for contract award decisions" (from GAO, 2009, Executive Summary). While the FAR does allow contracting officials broad discretion for how heavily to weight contractor past performance relative to other evaluation factors in their source selection evaluation, the GAO study revealed that "a majority of officials told us their reluctance to rely more on past performance was due, in part, to their skepticism about the reliability of the information and difficulty assessing relevance to specific acquisitions" (from GAO, 2009, p. 8).

The OFPP followed the GAO report in 2009 with a memorandum for the chief acquisition officers and senior procurement executives that acknowledged the "fragmented methods" that agencies used to collect and maintain contractor

performance information. The OFPP stated that agencies “maintain evaluations in internal data systems that are not available to acquisition officers outside that agency” (from OFPP, 2009, p. 1). This was occurring despite the FAR requirement that contractor performance information be shared between agencies. The OFPP issued new requirements to agencies pursuant to FAR subpart 42.15 changes effective July 2009 mandating submission of contractor performance records to PPIRS. The OFPP encouraged government contracting agencies to designate specific individuals to the task of ensuring that “accurate, complete, and timely information is submitted to PPIRS” (from OFPP, 2009, p. 2).

In 2011, the OFPP issued a memorandum to share the findings of its review of agency compliance with its 2009 directives and to provide additional recommendations for continued improvement in the collection of contractor past performance information. Researchers looked at nearly 700 performance reports submitted by the 10 federal contracting agencies that make up the bulk of the federal contracting, together accounting for 94% of federal contract obligations for fiscal year 2009 (OFPP, 2011). This review took place during the period in which contracting agencies were migrating to the Contractor CPARS for the purpose of submitting their contractor performance information to PPIRS.

The OFPP found that in 2009, the DOD had conducted required past performance evaluations on about 50% of contract awards and that the quality of those submitted were of varying quality with most deemed lacking in sufficient information. They evaluated the contractor performance report narratives based on how well they addressed the four required rating factors: quality of the product or service, ability to control cost, ability to meet schedule, and quality of business relations (OFPP, 2011). The DOD has used CPARS for submitting contractor past performance reports since 2004 (GAO, 2013).

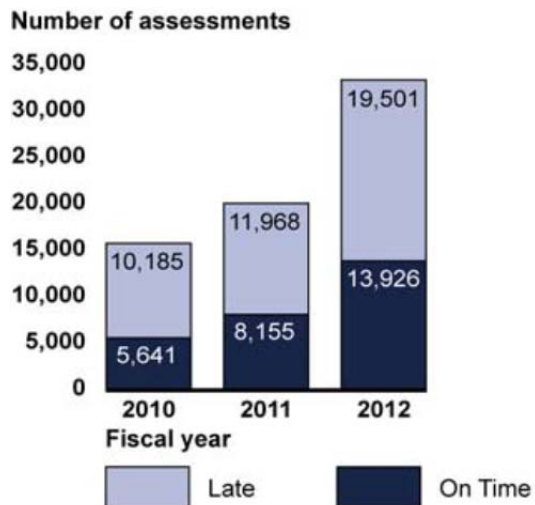
The OFPP review of performance reports submitted by the DOD revealed the following: 53.1% contained sufficient narrative for quality of product/service, 51% contained sufficient narrative for schedule control, 21.9% contained

sufficient narrative for cost control, and 50% contained sufficient narrative for business relations (OFPP, 2011).

The OFPP issued guidance to improve the quality of contractor past performance reporting. Agencies were directed to establish roles and responsibilities for those individuals appointed to review and submit performance reports and to facilitate proper training for all acquisitions personnel. A new increased focus on training and accountability was expected to significantly improve contractor performance reporting. Agencies are required to establish an agency point of contact accountable for disseminating guidance, facilitating training, developing oversight, and identifying improvements to the submission process. They were directed to institute a performance report review process for the purpose of monitoring their quality (OFPP, 2011).

In 2013, the OFPP took additional steps to improve the quality of contractor performance assessments. In March, it released a memorandum establishing a baseline for compliance with contractor performance reporting standards and setting agency performance targets for fiscal years 2013 through 2015 (OFPP, 2013).

A 2013 GAO report shows that measures taken by the OFPP and the FAR Council have led to higher rates of submission for performance assessments within the DOD. In 2007, fewer than half were completed. Submission of required assessments increased from 56% in October 2011 to 74% by April 2013. However, the report shows that the DOD is still failing to complete assessments on time. As Figure 2 shows, a large portion of the required assessments are completed late (i.e., after the 120-day requirement; GAO, 2013).



Source: Contractor Performance Assessment Reporting System (CPARS) Program Office.

Figure 2. DOD CPARS Reporting Compliance 2010–2012 (from GAO, 2013, p. 10)

The GAO report focuses on quantifying the effectiveness of the measures taken by the DOD to improve the quality and timeliness of its contractor performance reports that it submitted via CPARS. DOD requirements for contractor performance reports (as specified in the CPARS Guide) specifies that performance assessments must be completed and finalized within 120 days from the end of the contractor evaluation period and that the assessing official is responsible for preparing and finalizing the report. The report indicates that “although the CPARS Guide does not currently specify standards for completeness ... a recent proposed change to the FAR will address completeness by providing minimum government-wide standards for past performance rating elements. Specifically, the proposed rule requires that all assessments address, at a minimum, quality of product or service, timeliness, and management or business relations” (from GAO, 2013, p. 8). As of June 2013, there were no formally established standards for quality and completeness of CPARS performance narratives.

CPARS data is not and should not be the only source of information used to determine contractor past performance (DOD, 2012). Other sources of PPI

are references provided by said contractor, references provided by other federal contracting personnel, and other information not in CPARS. One of the limitations of CPARS is that federal contracting personnel are not required to enter PPI into CPARS if the dollar amount of the specific contract does not meet the minimum reporting threshold, as described in Figure 3. While the government may elect to enter PPI into CPARS below these thresholds, this is not common practice and, as a result, leads to gaps in PPI data below the \$1 million threshold for service contracts.

<b><u>Business Sector</u></b>	<b><u>Dollar Threshold</u></b>
<b>Systems</b>	<b>≥ \$5,000,000</b>
<b>Ship Repair &amp; Overhaul</b>	<b>≥ \$500,000</b>
<b>Services</b>	<b>≥ \$1,000,000</b>
<b>Health Care</b>	<b>≥ \$150,000</b>
<b>Operations Support</b>	<b>≥ \$5,000,000</b>
<b>Fuels</b>	<b>≥ \$150,000</b>
<b>Information Technology</b>	<b>≥ \$1,000,000</b>

Figure 3. DOD Reporting Thresholds

## **E. PREVIOUS STUDIES**

This is the seventh study of a series of research projects aimed at services contract management. The original research began in 2006 when Apte, Ferrer, Lewis, and Rendon examined a growing trend of DOD acquisition workload over the previous decade. As noted by Hart, Stover, and Wilhite (2013), one of the major observations of this research was a 66% increase in services contracting since 1999 but no corresponding increase in contract management personnel (Apte et al., 2006).

The second research project was an exploration of supply chain management of service contracts (Apte & Rendon, 2007). In general terms, the research focused upon how the Air Force used the Air Education and Training

Center (AETC) and Acquisition Management and Integration Center (AMIC) models (Hart et al., 2013). Apte and Rendon observed that these processes enabled cradle-to-grave handling of a service acquisition but allowed for a communication failure as program managers are not on site (Hart et al., 2013).

The third research project differed from the previous ones in that this was based on a survey of Air Force and Navy service contracts (Hart et al., 2013). Apte, Apte, and Rendon focused upon program management issues and approaches of service contracting (Apte et al., 2008). This was relevant to research conducted by Hart, Stover, and Wilhite but is not directly relevant to the narrative evaluation in CPARS.

The fourth research project focused on services contract management was published in 2009 and expanded upon the third research project by including the Army in the survey. Again, problems were noted with the acquisition team and communication issues (Hart et al., 2013). The major takeaway from this research is that most acquisition professionals believed that “their organizations [did not have] sufficient positions and that the available positions were [not] adequately filled” (from Hart et al., 2013, p. 29). Like the previous research projects, this improves the knowledge base for service contracts but is not directly related to the narrative evaluation in CPARS.

The fifth research project, conducted by Apte, Apte, and Rendon in 2010, collected data from the previous studies and analyzed them for DOD management techniques for services acquisition (Hart et al., 2013). They focused upon improving the communication of contracting personnel in the Army, Air Force, and Navy. Like the previous research projects, this improves the knowledge base for service contracts but is not directly related to the narrative evaluation in CPARS.

The sixth research project was completed in 2012 by Apte, Apte, and Rendon. This project focused upon the drivers of management practices of successful service contracts in the Army (Hart et al., 2013). Hagan, Spede, and

Sutton surveyed 168 key personnel to determine the definition of a successful service contract in the Navy (Hart et al., 2013). The outcome of this research was a correlation of modifications, protests, and communications between the acquisition team members. Like the previous research projects, this improves the knowledge base for service contracts but is not directly related to the narrative evaluation in CPARS.

The seventh and most germane research project was completed in 2013 by Hart, Stover, and Wilhite. The group explored the definition of a successful service contract by looking at the CPARS report cards stored within the PPIRS. A local database was created from 715 Army service contract CPARS report cards for the purpose of evaluating success determined by six CPARS evaluation areas: Quality of the Product/Service, Schedule, Cost Control, Business Relations, Management of Key Personnel, and Utilization of Small Business (Hart et al., 2013).

Contractor evaluation scores for the six evaluation areas were assigned a numerical value by the researchers according to the adjectival rating scale in Table 3. The research calculated the average scores to find any correlation to success or failure for the six evaluation areas. This rating system and the associated database is the foundation for the research that is to be examined in Chapter III and Chapter IV of this research project.

<b>Rating</b>	<b>Score</b>
<b>Exceptional</b>	5
<b>Very Good</b>	4
<b>Satisfactory</b>	3
<b>Marginal</b>	2
<b>Unsatisfactory</b>	1

Table 3. Area of Contract Evaluation Scores  
(from Hart et al., 2013, p. 44)

Of the 715 Army service contracts reviewed, 22 were deemed failures because they received a rating of unsatisfactory or marginal for one or more of



the six evaluation areas previously listed (Hart et al., 2013). Table 4 shows the breakdown of the 715 contracts reviewed by Hart, Stover, and Wilhite (2013).

	Failures	Success	Total	Failure Rate
Contracts	22	693	715	3.08%

Table 4. Total Contract Information (from Hart et al., 2013, p. 44)

Hart, Stover, and Wilhite (2013) found that service contracts had an average failure rate of approximately 3% (see Table 4). They cited several factors that led to contract failure, but a common theme among them was a lack of proper training for source selection evaluators (SSEs). SSEs must be able to properly evaluate each contractor's proposal according to the requirements in the RFP during the source selection process. Past performance information, to include objective ratings and descriptive narratives, plays an important role in the SSE's evaluation of the contractor's proposal. It is this past performance information that is the focus of our research project.

The seven previous service contract-related research projects have provided the background and the insight to pursue this research project. CPARS report cards, PPI, and the database of 715 Army service contracts generated by Hart, Stover, and Wilhite form the core of the analysis of program manager narratives and their relation to the objective scores in CPARS.

## F. SUMMARY

This chapter presented an overview of the DOD services acquisition process and the literature associated with said process. The chapter began with a presentation of the service contract management process as outlined in Beers' 2011 Services Acquisition Plan. Next, the chapter reviewed the CPARS to provide a framework for the database which is the basis for this research project. Finally, the chapter concluded with a review of previous research projects related to the service contracting field of study.

The next chapter discusses the research questions that this research attempts to answer, the methods used to conduct the research, the raw data to be analyzed, and the type of statistical analysis used to understand and explain the relationships of the data.

### **III. RESEARCH METHODOLOGY**

#### **A. INTRODUCTION**

This chapter discusses how the research was conducted and how the authors answered the research questions. The chapter begins by describing how the objective scores and narratives are entered into CPARS and how it relates to a successful contract. Then the chapter contains an in-depth description of how that data is analyzed, including a description of the statistical methodology used to perform the analysis. The last part of this chapter describes the interviews that were conducted, along with the interview question development methodology.

This research examines the value of CPARS report card narratives for service contracts as they relate to their associated objective scores. The methodology includes data analysis (including both sentiment and statistical analysis) and interviews with government agency contracting professionals.

#### **B. OBJECTIVE SCORES AND NARRATIVES**

The first phase of data analysis performed was a sentiment analysis of 715 Army service contract CPARS report card narratives. The CPAR Quality Checklist was used as a basis for developing the criteria for the categories and values for the analysis (*CPAR Quality Checklist*, n.d.). Data from 715 CPARS report cards of service contracts from 2012 were made available as the basis of this continuing research (Hart, Stover, & Wilhite, 2013). Each sample provided a series of objective scores in a spreadsheet that was associated with each narrative.

Table 5 provides an example of objective scores for the six evaluation areas used to rate a contractor's performance.

Quality of Product or Service	Schedule	Cost Control	Business Relations	Management of Key Personnel	Utilization of Small Business	Min Score	Success or Failure
VERY GOOD (4)	VERY GOOD (4)	VERY GOOD (4)	VERY GOOD (4)	VERY GOOD (4)	VERY GOOD (4)	4	SUCCESS

Table 5. Example of Objective Scores

Table 6 provides examples of narratives that describe in the appropriate amount of detail the performance of the contractor for that particular objective score. For example, an objective score of *very good* for the area of quality of product or service does not tell the full story. The narrative associated with an objective score of very good is meant to explain how the contractor maintained a very good level of quality via a quality control program that was operated efficiently and effectively throughout the life of the contract.

<p><b>Quality of Product/Service:</b> This contractor has done a very good job overall. This particular task order is for the management Firm Fixed Priced piece in support of a major customer. Overall, quality of the products and services remains high and the contractor quality control program runs efficiently and effectively.</p> <p><b>Schedule:</b> Contractor continues to provide products/services on time. Contractor continues to be very adaptive to unanticipated work requests.</p> <p><b>Cost Control:</b> Contractor has historically produced accurate invoices. This is certified annually under the Contractor Manpower Reporting system.</p> <p><b>Business Relations:</b> Contractor has very good Business Relations. The government has never encountered any difficulty in working with this contractor to resolve any issue. Contractor has three (3) subcontractors assisting in the performance of this operation. Contractor provided daily reports on all equipment under their control for maintenance. The contractor was effective in programs such as equal opportunity, employee incentive, energy conservation, safety, security, and upward mobility.</p> <p><b>Management of Key Personnel:</b> All key personnel have performed very well.</p> <p><b>Utilization of Small Business:</b> Contractor utilizes three small businesses as subcontractors on this task order.</p> <p><b>Overall Comments:</b> Contractor continues to satisfy customers. The government frequently receives positive comments on the end product received from this contractor. Contractor provides a very good service through the cost plus contract. The government definitely would recommend awarding future contracts to this contractor.</p> <p>Given what I know today about the contractor's ability to execute what he promised in his proposal, I DEFINITELY WOULD award to him today given that I had a choice.</p>
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Table 6. Example of Narratives Associated with Objective Scores

To analyze the narratives in the samples and see how they relate to the objective scores, a series of criteria had to be developed. The CPAR Quality Checklist was used as a basis for developing the criteria (*CPAR Quality Checklist*, n.d.). Narratives were assigned several scores relating to their quality, robustness, compliance with directions in the CPAR Quality Checklist, and their value and content compared to their related objective scores from the CPARS report cards.

First, we answered a series of yes or no questions. These questions are listed as follows.

First, does the narrative address all performance areas assessed as an objective score? This means that if one of the five objective scores was marked as not applicable, there would not need to be something written in the narrative specifically mentioning that area. Otherwise, there should be something written in the narrative to address the score given for each area in the objective scores.

Second, is the narrative based on objective data? In answering this question, *objective data* is defined as not being influenced by personal feelings or opinions of the person inputting the data, but only considering and representing facts.

Third, is the narrative free of statements to avoid, as defined by the CPAR Quality Checklist? The following phrases (or those closely similar) qualify as narrative statements to avoid: “outside the scope of the contract,” “in our opinion,” “appeared,” “we believe,” “it is our hope,” “we are not happy,” “we did not like,” “we think,” “could be,” and “we hope.” Appendix B provides an expanded list of narrative statements to avoid.

Fourth, is the narrative for each performance area of a robust and comprehensive nature, as described in the three examples of the CPAR Quality Checklist, labeled “Block 20 - insufficient narrative vs. a better way to write this”? Appendix C provides specific examples of insufficient narratives.

Fifth, could a contracting layman understand the work that has been performed? This will not require an opening statement giving a synopsis of the contract in the narrative because that would be part of a separate data field defined as a sample contract effort description within CPARS (Block 17) outside the narrative portion (Block 20). Rather, the question would answer whether there was an excessive use of jargon or acronyms in the narrative, to the point that even someone familiar with common terms associated with contracting would be unable to understand the discussion in the narrative.

Once the yes or no questions have been scored, the following two questions would be answered with a possible score of 1 to 5.

First, is the narrative beneficial to a user of the information above and beyond the objective scores? To earn a score of 1, the narrative provides an unsatisfactory amount of beneficial data to the user above and beyond what could be gleaned from looking over the objective scores assigned in Block 18. To earn a score of 2, the narrative provides a marginal amount of beneficial data to the user above and beyond what could be gleaned from looking over the objective scores assigned in Block 18. To earn a score of 3, the narrative provides a satisfactory amount of beneficial data to the user above and beyond what could be gleaned from looking over the objective scores assigned in Block 18. To earn a score of 4, the narrative provides a very good amount of beneficial data to the user above and beyond what could be gleaned from looking over the objective scores assigned in Block 18. To earn a score of 5, the narrative provides an exceptional amount of beneficial data to the user above and beyond what could be gleaned from looking over the objective scores assigned in Block 18.

Second, does the narrative correlate to the objective scores that have been assigned? To earn a score of 1, more than one of the performance areas described in the narrative is contradictory to the objective scores assigned in Block 18. To earn a score of 2, one (but no more than one) of the performance areas described in the narrative is contradictory to the objective score assigned in Block 18. To earn a score of 3, the narrative is merely satisfactory in

describing accurately why the objective scores are assigned as they are in Block 18. To earn a score of 4, the narrative is very good in describing accurately why the objective scores are assigned as they are in Block 18. To earn a score of 5, the narrative is exceptional in describing accurately why the objective scores are assigned as they are in Block 18.

The next step in conducting our analysis of the narratives was to figure out the best way to go about handling the sheer volume of 715 report cards while at the same time thoroughly reviewing each report card. Software was an initial thought, but after looking at this option in depth, it became obvious that the process of learning how to use and manipulate the software to give the desired output would be more time consuming than it was worth. For this sample size, it turns out that it would be best to conduct an Inter-Rater Reliability Test (Gwet, 2008) to determine a baseline agreement amongst the raters of the questions outlined previously, and then go through each narrative thoroughly by the raters. If this could prove that the raters were trained and could rate each sample similarly, then each of the 715 samples would not need to be analyzed by each researcher. Using this approach, the 715 samples could be split up amongst the raters and would yield similar results across each rater for the same sample.

After conducting training on the procedures outlined above in conducting each score, a sample of 30 reports was randomly selected from the original 715 and the reports were independently rated by each rater. Appendix A provides the results of the Inter-Rater Reliability Testing.

To score each set of scores for the yes or no questions, a score of 3 was given if all three of the scores matched. The only other possibility for the yes or no questions is for two of the scores to match and the other to not match (highlighted in red). In this case, a score of 1 was assigned since two of the scores had a 50% rate of agreeing to the other scores while the remaining score had a 0% rate of agreeing to the other scores. In the end, the scores for each set of scores was summed and then divided by 90 to get the total agreeability

percentage in each category. The acceptable threshold was set at whether all raters could match scores for each sample with a minimum of 80% reliability.

The results for the yes or no questions show the percentage of agreeability between each rater's scores of the 30 randomly selected reports. There was 100% agreeability on whether the narrative addresses all performance areas assessed. There was 84.44% agreeability on whether the narrative was based on objective data. There was 97.877% agreeability on whether the narrative was free of statements to avoid. There was 80% agreeability on whether the narrative was robust and comprehensive. There was 91.11% agreeability on whether a contracting layman could understand the work performed.

For the questions that were assigned scores of 1 to 5, the scores show the percentage agreeability of whether the raters could agree in their results while allowing for a 1 point difference amongst raters with no penalty. The threshold was set at whether all raters could match scores for each sample within a 1 point difference at a minimum 80% reliability. If a set of scores all matched, a score of 3 was given for the set. If a set of scores had two occurrences of scores within 1 (for example, 1, 2, 3 or 3, 4, 5), a score of 2 was given for the set. If a set of scores had only one occurrence of scores within 1 (example 2, 4, 5), a score of 1 was given for the set. If there had been an instance where scores of 1, 3, and 5 had been given, a score of 0 would have been given for the set (this did not occur).

The results show the percentage of agreeability between each of the rater's scores within a score of 1 based on the 30 randomly selected samples. There was 93.33% agreeability within 1 on whether the narrative is beneficial above and beyond the objective scores. There was 80% agreeability within 1 on whether or not the narrative correlates to the objective scores assigned.

Because all of the total agreeability percentages were able to meet the minimum 80% threshold, each rater went through ~230 of the remaining report



cards independently and the results were combined and analyzed as if all three raters had gone through all 715 report cards. The next section discusses the methodology for the statistical analysis of the database.

### **C. METHODOLOGY FOR DATABASE STATISTICAL ANALYSIS**

An independent 2-sample test for Proportions was performed to find the statistical significance of the proportions of the outcomes for successful versus unsuccessful contracts for the questions that have only two possible outcomes (yes or no). The  $p$  value in the hypothesis test shows the level of statistical significance. A  $p$  value of less than .05 shows statistical significance. A  $p$  value of less than .01, therefore, shows a much higher degree of statistical significance than even the .05 values.

A chi-square test was performed to show collectively whether the results for the questions that have five possible outcomes were statistically different for successful versus unsuccessful contracts. The  $p$  value used in the chi-square test shows the level of statistical significance and the results are interpreted in the same way as in the hypothesis test that compares two independent proportions (explained in the previous paragraph). The next section discusses the interview questions that were asked government contracting personnel.

### **D. INTERVIEWS OF GOVERNMENT CONTRACTING PERSONNEL**

In support of the data analysis, interviews with contracting professionals from two DOD contracting agencies were conducted. These interviews consisted of a series of questions asking the subjects about how they use and to what extent they value CPARS and other sources of contractor past performance information and to what extent they value the narratives compared to the performance objective scores.

Our research includes the study of human subjects and therefore, as directed by regulation from the Department of Health and Human Services, the research interviews required approval from an institutional review board (IRB)

under the guidance of the NPS Office for Human Research Protections (OHRP) specialist. The purpose of the IRB is to protect human subjects in research and to ensure that basic ethical principles are adhered to.

We conducted interviews at two geographically diverse DOD contracting agencies. The interviewees had some combination of significant experience submitting contractor past performance information to CPARS and/or retrieving from the Past Performance Information Retrieval System (PPIRS) past performance information for use in contract administration or source selection. Interview subjects were chosen by their respective department heads.

#### **E. INTERVIEWS QUESTION DEVELOPMENT METHODOLOGY**

Interviews with contracting professionals who are experienced with the CPARS and PPIRS systems provide the requisite context and depth of knowledge needed to accurately and robustly analyze and interpret the statistical data derived from the CPARS narratives. The specific interview questions were designed to avoid, to the extent practicable, injection of bias by steering respondents. Interviewing subjects at two government agencies with significantly different missions and contract award types facilitates the collecting of information across a wide spectrum of knowledge of the CPARS/PPIRS systems. Interviewing individuals with varying roles in collecting, submitting, and utilizing contractor past performance information provides us with responses across a diverse spectrum of experience. A complete listing and explanation of the interview questions can be found in Appendix D.

Following this second phase of research, the study moved into analyzing CPARS contractor past performance report card narratives and comparing that data to the information retrieved from these contracting professional interviews.

#### **F. SUMMARY**

This chapter presented an overview of the methodology for collecting the data, analyzing the CPARS narratives, and conducting interviews of DOD agency

contracting professionals. The objective scores were introduced and discussed. Next, the chapter reviewed the CPAR Quality Checklist to provide a framework for analyzing the database which is the basis for this research project. The methodology for the database statistical analysis was then explained. Finally, the chapter concluded with a review of interview questions posed to DOD contracting professionals. The next chapter discusses the results of the statistical analysis, responses to interview questions by DOD contracting professionals, and present findings that answer the research questions posed in Chapter III.

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## **IV. ANALYSIS**

### **A. INTRODUCTION**

This chapter reveals the results of the analysis that examined the value of CPARS report card narratives for service contracts as they relate to their associated objective scores. This chapter begins with an overview of the data used to support the research presented in this report. The overview first describes the database created for this report in order to show from where the results of the statistical analysis were derived. The overview then provides a description of the series of interviews that were conducted to show from where the results of the interview findings came. Once the database and the interviews are described, the chapter explains the statistical analysis findings in detail. Following the description of the statistical analysis findings, this chapter describes the interview findings with each finding supported by specific commentary from the interviews.

### **B. OVERVIEW OF THE DATA**

The database used for the statistical analysis portion of this project is limited to the 715 Army service contracts analyzed by a previous NPS MBA project (Hart et al., 2013). The selection criteria for those 715 contracts was limited to Army service contracts, “contracts only submitted by Mission Installation Contracting Commands (MICCs), and contracts from only five MICC offices” (from Hart et al., 2013). Of note, out of the 715 contract reports contained in the database, 22 were labeled as failures which “resulted in a total contract failure rate of 3.08%” (from Hart et al., 2013, p. 56). The determination for which contracts should be specified as failures “was determined by whether a contract received a marginal or unsatisfactory objective rating in quality of product/service, schedule, cost control, business relations, management of key personnel, or utilization of small business” (from Hart et al., 2013, p. 50).

Interviews with contracting professionals from two DOD contracting agencies were conducted and provided the basis for the interview analysis. These interviews consisted of a series of questions asking the subjects about how they use and to what extent they value CPARS and other sources of contractor past performance information and to what extent they value the narratives compared to the performance objective scores. Appendix D provides the specific questions asked during the interviews and the reasoning behind those questions.

### **C. STATISTICAL ANALYSIS FINDINGS**

Next, we reveal the findings from our statistical analysis. First, we describe each of those findings in detail. We cover whether the narratives address all performance areas assessed, whether the narratives are based on objective data, whether the narratives are free of statements to avoid, whether the narratives are robust and comprehensive, and whether the narratives are written so that a contracting layman should understand the work performed. Then, we cover whether the narrative provides beneficial data above and beyond what could be gleaned from looking over the objective scores assigned. Lastly, we cover how well the narrative sentiment matches up with the objective scores assigned. At the end of this section, a summary chart of the statistical analysis findings is provided in Table 7.

#### **1. Narrative Addresses All Performance Areas Assessed?**

Overall, the narratives addressed all performance areas assessed 82% of the time. This means that ~18% of the time, contracting professionals are not submitting to CPARS contractor performance narratives in accordance with the guidelines provided in the CPARS user's manual for this requirement. This was less problematic with unsuccessful contracts at ~95% than with successful contracts at ~81%. The difference in the proportion of times that the narrative addressed all performance areas assessed in successful and unsuccessful contracts is statistically significant ( $p < .05$ ).

## **2. Narrative Is Based on Objective Data?**

Overall, the narratives were based on objective data ~77% of the time. This means that ~23% of the time, contracting professionals were not submitting to CPARS contractor performance narratives in accordance with the guidelines provided in the CPARS user's manual for this requirement. However, in unsuccessful contracts, the narratives were based on objective data 100% of the time. This is significantly different from the ~77% in successful contracts ( $p < .01$ ).

## **3. Narrative Is Free of Statements to Avoid?**

Overall, the narratives were free of statements to avoid ~97% of the time. This means that ~3% of the time, contracting professionals were not submitting to CPARS contractor performance narratives in accordance with the guidelines provided in the CPARS user's manual for this requirement. This was slightly more problematic with unsuccessful contracts at ~86% than with successful contracts at ~97% ( $p < .01$ ).

## **4. Narrative Is Robust and Comprehensive?**

Overall, the narratives were robust and comprehensive ~63% of the time. This means that ~37% of the time, contracting professionals were not submitting to CPARS contractor performance narratives in accordance with the guidelines provided in the CPARS user's manual for this requirement. This was less problematic with unsuccessful contracts at ~91% than with successful contracts at ~62% ( $p < .01$ ).

## **5. Could a Layman Understand Work Performed?**

Overall, the narratives were written so that a contracting layman should understand the work performed ~64% of the time. This means that ~36% of the time, contracting professionals were not submitting to CPARS contractor performance narratives in accordance with the guidelines provided in the CPARS user's manual for this requirement. This was less problematic with unsuccessful contracts at ~82% than it is with successful contracts at ~64% ( $p < .05$ ).

## **6. Is the Narrative Beneficial Above and Beyond Objective Scores?**

As previously described in the methodology chapter, the chi-square test determines whether distributions of scores are statistically different. Using this test, we determined that there was a difference between successful and unsuccessful contracts in whether the narratives were beneficial above and beyond the objective scores. Unsuccessful contracts tended to have more beneficial CPAR report card narratives than successful contracts.

Overall, the narrative provided an unsatisfactory amount of beneficial data to the user ~12% of the time. However, there were no unsuccessful contracts that provided an unsatisfactory amount of beneficial data. The narrative provided a marginal amount of beneficial data ~22% of the time. There were no unsuccessful contracts that provided a marginal amount of beneficial data. The narrative provided a satisfactory amount of beneficial data ~28% of the time. The narrative provided a very good amount of beneficial data ~21% of the time. The narrative provided an exceptional amount of beneficial data ~18% of the time. This was much more likely to occur with unsuccessful contracts than with successful contracts at ~17%.

## **7. Does the Narrative Correlate to Objective Scores Assigned?**

We again used the chi-square test and determined that there was not a difference between successful and unsuccessful contracts in whether the narrative correlates to the objective scores assigned.

Overall, the narrative sentiment was contradictory to more than one of the objective scores assigned ~2% of the time. The narrative sentiment was contradictory to one of the objective scores assigned ~6% of the time. The narrative sentiment was satisfactory in describing accurately why the objective scores were assigned as they were ~28% of the time. The narrative sentiment was very successful in describing accurately why the objective scores were assigned as they were ~40% of the time. The narrative sentiment was



exceptionally successful in describing accurately why the objective scores were assigned as they were ~24% of the time.

Table 7 is a summary chart of the statistical database analysis that we have just described in detail.

	Result	Overall	Unsuccessful Contract	Successful Contract	Successful vs Unsuccessful Statistically Significant?	P Value
Narrative Addresses All Performance Areas Assessed?	No	18.46%	4.55%	18.90%	Yes	0.043
	Yes	81.54%	95.45%	81.10%		
Narrative Based On Objective Data?	No	22.52%	0.00%	23.23%	Yes	<.01
	Yes	77.48%	100.00%	76.77%		
Narrative Is Free Of Statements To Avoid?	No	3.08%	13.64%	2.74%	Yes	<.01
	Yes	96.92%	86.36%	97.26%		
Narrative Is Robust & Comprehensive?	No	37.48%	9.09%	38.38%	Yes	<.01
	Yes	62.52%	90.91%	61.62%		
Could A Layman Understand Work Performed?	No	35.52%	18.18%	36.08%	Yes	0.042
	Yes	64.48%	81.82%	63.92%		
Is The Narrative Beneficial Above & Beyond Objective Scores?	Score 1	11.61%	0.00%	12.12%	Yes	<.01
	Score 2	21.68%	0.00%	22.37%		
	Score 3	27.97%	18.18%	28.28%		
	Score 4	20.84%	27.27%	20.63%		
	Score 5	17.76%	54.55%	16.59%		
Does The Narrative Correlate To Objective Scores Assigned?	Score 1	1.82%	4.55%	1.88%	No	0.141
	Score 2	6.43%	4.55%	6.49%		
	Score 3	27.83%	9.09%	28.43%		
	Score 4	40.42%	40.91%	40.40%		
	Score 5	23.36%	40.91%	22.80%		

Table 7. Results of Statistical Database Analysis

## **D. INTERVIEW FINDINGS**

As previously discussed, we interviewed contracting professionals from two geographically diverse DOD contracting agencies. We did this to find out how they use and to what extent they value CPARS and other sources of contractor past performance information. We also wanted to find out to what extent they value the narratives compared to the objective scores. In the process of conducting these interviews, we made some interesting discoveries that could be useful in improving the contracting process specifically related to the narrative portion of past performance assessment reports. Below are the eight findings along with specific excerpts from the interviews supporting each finding.

### **1. CPARS Is Still Often Not Reliable, Robust, or Comprehensive Enough**

The information in CPARS/PPIRS is oftentimes not reliable, robust, or comprehensive enough to allow source selection officials to place a significant enough weight on past performance. This finding was also noted in several GAO and OFPP memorandums mentioned earlier in the literature review chapter of this report.

The Past Performance Information Retrieval System (PPIRS) is an information system that draws from the reports entered into CPARS. The contracting professionals we interviewed who deal regularly with utilizing the data in PPIRS felt that if the information in PPIRS were more reliable and consistent, they would be able to give more weight to it when making source selection decisions. The interviewees stated that when they knew there should be something in PPIRS on a particular contractor for a particular type of contract and dollar amount, they would often search for the contractor's name in CPARS, only to receive this response: "no information has been entered."

Interviewee Number 2 made the recommendation that PPIRS would be a more useful tool if source selection teams could get more information in there from end users. Interviewee Number 2 was hesitant because this recommended

improvement will likely create more work for both the end user and the contract specialist, but suggested that DOD may want to lower the dollar value threshold to help contracting offices that normally deal with lower value contracts.

Interviewee Number 5 stated that the CORs and contracting officers know generally how the report is supposed to be done, “but it is just something that is not executed as well as it could be.” Interviewee Number 5 stated that information from CPARS/PPIRS is not really helpful in source selection and contract administration because the database is not maintained well enough and not enough thought is put into them. Interviewee Number 5 stated,

Mostly what I see is there is either satisfactory or excellent reviews even if there are problems, the problems are not always documented and I think that in one case at least it is actually the same CPARS pasted in to each year, each period and you could tell that even the dates were actually off sometimes. So it is not something that we put enough thought into, which makes it not a very useful tool in source selections, especially when you know other government agencies might be a little bit similar in their practices and it is not really something ... and it is something that you need to take with a grain of salt. I think when we are going through source selection really what we look for is the offeror’s technical understanding of the requirements. Sometimes it is obvious that there is a little bit more business development language than actual understanding of the work and that seems to be more of the focus than the actual CPARS.

We also noted similar issues in conducting our database analysis, that in some cases the exact or almost the exact same narrative was cut and pasted into several different contract report cards.

## **2. Unsuccessful Contracts Are More Reliable, Robust, and Comprehensive**

Unsuccessful contracts tend to have more reliable, robust, and comprehensive past performance information available in their CPARS/PPIRS reports.

Interviewee Number 3 stated that there might be a reason why the unsuccessful contracts were typically more robust and comprehensive than the successful ones:

If the contractor is really just coasting along doing everything really, really well, I think a lot of times you might not have a really in depth report because the COR says, “hey, everything’s good. I don’t have to worry about anything.” So, they’re just going to kind of mark it up, “hey, they’re good or they’re bad or whatever on everything.” I think the ones that maybe would take longer is when you have issues.

Interviewee Number 3 went on further to state that narratives might be longer for a poor performance because

they know that those are going to get ... the contractor is going to be able to review those as well as the contracting officer, so the COR should put more time into those to just, you know, really explain himself why you’re giving a poor rating. Typically, if you’re getting a good rating, the contractor is just going to say, “yup, I agree. Go ahead and post it to PPIRS. I agree with it.” But if you’re giving them a negative rating, you’re really going to want to explain yourself.

### **3. Assigning Weight to Past Performance Using the Information Available**

The appropriate amount of weight that should be assigned to past performance in making source selection decisions should be correlated to the source, availability, quality, and relevancy of the past performance information.

Interviewee Number 3 made the comment that the weight assigned to contractor past performance in PPIRS is basically a direct correlation to the relevancy of the past performance combined with how robust and comprehensive the written narrative is.

Interviewee Number 5 stated that if they had negative past performance information from PPIRS or from a questionnaire, they would give it more weight, but generally they have to give more weight to the technical portions of a

proposal because PPIRS is not able to produce the information they need and the questionnaire is not likely to produce negative past performance information.

Interviewee Number 6 stated that it is more beneficial if the source selection authority is able to access multiple contracts of similar scope and complexity. Interviewee Number 6 stated, “If there is consistency I would place greater value in that evaluation. If they are all over the place then it is really hard to put a ... it is kind of subjective how much value you put into a particular CPAR.”

#### **4. What to Do With Contradictory Past Performance Information**

PPIRS sometimes contains information in the narrative that is either contradictory or does not quite match up with the objective scores. When the objective scores and narrative sentiment in PPIRS is mismatched, contracting professionals tend to give more weight to the narrative versus the objective scores.

Interviewee Number 1 made the strong recommendation that the contracting professionals who regularly deal with PPIRS in looking for past performance information need to take note of when there is conflicting information between the objective scores assigned and the written narrative. That interviewee said that when source selection team members find something like that, they should send the report back to whoever entered the information and make them correct that section. This comment was reiterated by Interviewee Number 4:

I’d send it back and tell whoever wrote it to come up with why their scores was what it is and explain to them, look, I’m looking at this and I’m reviewing what you wrote, but it doesn’t justify the outstanding rating or the poor rating.

Interviewee Number 2 stated that they give considerably more weight to the narrative versus the objective scores because

sometimes you will see the government rated them very good, but then the description you’re reading is like ... it doesn’t match ...

there's a description next to what very good should be and then what they're saying doesn't match very good.

Interviewee Number 2 also stated that the narrative is usually more beneficial because sometimes

there's a bunch of different categories and depending on what the contract is for, a lot of them may be N/A, so the description is a lot better than just saying like ... like if you're doing a firm fixed price contract but for some reason they rate cost control and they say, "excellent," well, I would hope so because we're only paying the firm fixed price.

## **5. Reliable and Accurate Past Performance Retrieval Methods Are Needed**

Contractor past performance reports might not be as accessible as they should be in PPIRS because contracting professionals are not always applying due diligence in identifying the appropriate entity using identifying information within the contractor's parent organization. Examples of such identifying information would be an appropriate cage code or DUNS (Dun and Bradstreet Data Universal Numbering System) number.

Interviewee Number 3 alluded to the fact that it might be more beneficial to have the PPIRS database set up to more easily find similar contracts for a given contractor. Interviewee Number 3 stated that

one of the things we're really looking for when we're doing our source selection is the relevancy of past performance, so not just, "hey, they performed well on a bunch of contracts." That matters, but not as much as it would matter if they performed really well on a similar type contract to the one that we're looking to award. So, you know, you may have a contract for a completely different service that this company did and they got really awesome ratings, that gives us an idea that they're able to perform well and are probably good workers, but what does that really tell us about how they're going to perform this contract that is a completely different type of service. So, we use it, but I would say we're going to ... we have other methods of doing past performance research to look at their relevancy and, you know ... yeah, their relevancy to the contract that we're looking to award. To me that's more important. It's how will they perform on a similar type contract. But if they've

never done this type of work before, yeah, then it would be weighed more heavily than this stuff that you're looking at in PPIRS because that's all you really have to go on. So, I think the reports are good enough to explain, hey, this is the type of work that's being done, so you can really make a good comparison.

We noted that while this might give the contracting professionals information to use in weighing past performance, the information provided as references from contractors would almost certainly be skewed to positive references. A contractor will most likely omit a recent contract reference that they know they performed poorly on. This is really where the process of incorporating past performance information into source selection is failing in that PPIRS should be the avenue for source selection officials to find negative past performance information if it exists. Too often, it looks like data in the system is not organized well enough. The way the data is organized is not helping source selection officials mine the database to uncover this recent and relevant negative past performance information as well as it should.

When asked about ideas of how CPARS/PPIRS could be improved, Interviewee Number 9 had the recommendation that "there could be something in the PPIRS system that would allow you ... to weed through the relevancy aspect."

## **6. Past Performance Questionnaires Are Inadequate**

Source selection officials often need to solicit contractors for references or ask them to fill out a past performance questionnaire because there is a lack of reliable, robust, and comprehensive past performance information available in PPIRS.

Because they are often unable to find relevant, robust, and comprehensive information about a particular proposal in PPIRS, Interviewee Number 3 stated,

In our solicitations or our RFPs, when we put those out then we'll ask for the contractor to submit ... for example, we might ask them to submit five of their most recent contracts that they've done for

similar type work with references. So, they would provide references of, you know, John Doe who they did work for in, you know, for NAVSEA out of Washington, DC, or something like that. I could contact him and say, “hey, how did these guys perform on this?” Or, I could send them an actual ... like a survey to fill out and then we’ll get that all filled out and then we know that it’s a relevant contract, we know it’s a recent contract that they’ve done, So, it’s a lot easier to use that information than it is a lot of times in PPIRS, because if you go into PPIRS it’s like the most recent one might be like 2009 or 2010 and it’s like a completely different contract.

Interviewee Number 5 made note of a similar questionnaire and reiterated the issue with it by stating,

When we have source selections here at our agency, we usually have the contractors fill out a past performance questionnaire. It is a standard questionnaire that we send out for each offeror and a government representative has to fill them out and send them back directly to the contracting officer. Now those are a little bit different in that it is not CPARS, but they do have to reference it and we do validate that it is accurate. But I mean I think that sometimes you find that of course they are only going to give references for their best clients so they are always going to be good or at least satisfactory.

## **7. Timely Reports Must Be of High Quality to Be Useful**

There has been a recent increase in senior-level interest to complete required CPARS reports in a timely manner but not an increased interest in the quality of those reports.

Interviewee Number 2 stated that the narratives are

not as lengthy as they could be. Like, if you figure we spend three months on something, you would think that they would have like a real good paragraph ... very detailed—but sometimes it seems like I get more information talking to people than the two sentences they put in CPARS.

Interviewee Number 7 brought up a noticeably increased emphasis on timely completion of the report card but said it was just as important to have

quality, because really you are wasting your time if you are just putting this ... you are wasting everybody’s time. The emphasis is,



right now more timeliness, we have gotten it from very high up that they want these done, they haven't really said done well. So I think after we get our hands around and get people doing it within the timeframe they are supposed to be doing it, then we would like to turn to the quality of them. I know some of the field activities have already taken that step. I heard one field activity actually had ... the commanding officer went through every single CPAR done in the last year and pulled some of them back and said that he wanted it redone because it didn't have a narrative that supported the ratings they gave them. So with that, if you are getting good, quality CPARS, I think it is a very valuable tool and one that should be used in source selections because it is like having—it is like the Angie's List for the federal government that you have something that you have feedback on customers.

## **8. Miscellaneous Recommendations for Improvement**

Several of the interviewees made recommendations for improving services acquisition related to contractor past performance information. The recommendations were to add more analysis tools and performance metrics in PPIRS, better monitor the workload of CORs, better train the workforce on writing CPARS narratives, and better broadcast the findings of CPARS Program Office audits.

Interviewee Number 6 recommended that the program office could

load CPARS up. I mean, you could have cost analyses, you could have trend analyses, and you could have performance analyses. I mean did they perform, how well did they perform, did they make their timelines, was their product accepted, did it go through developmental tests, operational tests, was it kicked back?

Interviewee Number 7 mentioned the workload of the CORs as a potential factor in the inadequacy of the contract report cards, stating,

I did statistics on how many contracts and we had some CORs that were definitely way overloaded. Based on what they were saying, really to do a good job on a good contract you should only be a COR on like one major contract. Smaller ones, two to three, but we have people—six or eight, more than that. So our workload was—I don't think that was the reason they weren't doing their CPARS, but it was one of the reasons they weren't doing all of the things they needed to do.

When asked about ways that would help improve CPARS so that it could be more useful, Interviewee Number 8 stated, “Training is probably the biggest one.” Interviewee Number 8 also stated, “We don’t train our people very well in writing, especially when you have engineers that are filling out some of these things. They can be rather cryptic.”

Interviewee Number 8 also made the recommendation that when there are audits conducted at a command regarding CPARS, it needs to be better broadcast to the people involved in services acquisition to better gain access to the results of those audits along with the trends across the whole of government. Specifically, Interviewee Number 8 stated,

the CPARS Program Office goes out and does audits periodically. There really hasn’t been—one time they did a lessons learned and publicized that, but it would be good to see some trends, things that they could suggest that they are seeing people having a hard time doing. You know, that would help improve CPARS as a role if they are finding some people; certain contracts are harder to do. I don’t know. Whatever they are finding in their audits, we never get the result.

## **E. SUMMARY**

This chapter revealed the results of the research that examines the value of CPARS report card narratives for service contracts as they relate to their associated objective scores. This chapter began with an overview of the data used to support the research presented in this report. The overview first described the database created for this report in order to show from where the results of the statistical analysis originated. The overview then provided a description of the series of interviews that were conducted to show from where the results of the interview findings came. Once the database and the interviews were described, the chapter explained the statistical analysis findings in detail. Following the statistical analysis findings, this chapter described the interview findings, with each finding supported by specific commentary from the interviews. The next chapter includes a summary of the research, conclusion of the findings, and areas for further research to enhance the knowledge of service contracting.

## **V. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH**

### **A. SUMMARY**

The DOD obligated approximately \$360 billion in fiscal year 2012 for contracts for supplies and services (GAO, 2013). In order to support best practices for government acquisition, the Office of Federal Procurement Policy (OFPP) directs in FAR Part 42 that federal contracting agencies shall use CPARS as their primary tool for documenting contractor past performance.

CPARS is a system that was designed to be used by contracting professionals for submitting and retrieving contractor past performance information. There have been many discrepancies and failures specified in recent GAO reports with the utilization of CPARS. Government contracting agencies are failing to properly document contractor past performance information within the schedule requirements mandated by OFPP. In a 2009 report, the GAO analyzed data from 2007 and showed that DOD contracting components completed required contractor past performance report cards less than half of the time (GAO, 2009).

Subsequently, the DOD increased its focus on training and education for contracting professionals, which has led to an increase in contractor performance assessments being completed and submitted to PPIRS. In the last published report during the research period of this project, the GAO (2013) noted significant gains in completion rates. Fifty-six percent of required reports were completed in 2011 while 74% were completed in 2013. However, according to the same report, over half of these reports were submitted late. In addition, many CPARS report cards contain narratives that are either insufficiently detailed or conflict with their associated objective scores. Late reports lacking sufficient accurate information provide less-than-optimal information to the contracting professionals who rely on these report cards for source selection and contract administration purposes.

## **B. CONCLUSION**

### **1. Research Findings**

The purpose of this research was to determine the value of contractor performance assessment report narratives for services contracts by comparing the relationships between narratives and objective scores in order to recommend improvements to the CPARS contractor performance information documentation process. To identify this value, the research focused on answering five research questions. Our research questions and findings are as follows.

- To what degree are government contracting professionals submitting contractor performance narratives to CPARS in accordance with the guidelines provided in the CPARS user's manual?

To answer the first research question, the data indicated that, overall, contracting professionals inputting reports into CPARS are doing a highly effective job at ensuring that their narratives are free of statements to avoid (~96.9%). These professionals are not doing as well in addressing all performance areas assessed in their objective scores (~81.5%) or in ensuring that the narratives are based on objective data (~77.5%). The areas that contracting professionals seem to have the most issues with, however, are writing a comprehensive narrative (~62.5%) and ensuring that a contracting layman (such as someone who might need to access CPARS data in order to make a decision about a future contract award) can fully understand the work performed (~64.5%). With the exception of the narratives being free of statements to avoid, contracting professionals were more effective in all categories when writing narratives for unsuccessful contracts than with successful ones.

- What is the added value of the contractor performance narratives beyond the value of the objective scores for performance?

In answering the second research question, the data indicated that, overall, contracting professionals inputting data into CPARS are doing a better job at providing beneficial data in the narrative when the contract is unsuccessful

versus when it is successful. Only 38.6% of the sample narratives, whether successful or unsuccessful, provided a very good or exceptional amount of beneficial data above and beyond what could be gleaned from looking over the objective scores assigned. This shows that there is clearly room for improvement in this area.

- What is the statistical relationship between the sentiment contained in the narratives and the objective scores for contractor evaluations?

In answering the third research question, the data indicated that, overall, contracting professionals who input data into CPARS are writing information in their narratives that contradicts at least one of the objective scores assigned ~8.3% of the time. This leaves room for improvement. Contracting professionals were slightly better at matching the narrative sentiment to the objective scores in unsuccessful contracts (~81.8% scoring either very good or exceptional) than in successful contracts (~63.2% scoring either very good or exceptional).

- To what degree do the interview findings contradict, support, or enhance the findings for the three research questions above?

In answering the fourth research question, the interviews indicated that there are no issues with narrative statements to avoid. This supports the database analysis conclusion that contracting professionals inputting reports into CPARS are highly effective at ensuring that their narratives are free of statements to avoid (~96.9%). The interviews indicated that there are only a few minor issues with addressing all performance areas assessed and ensuring that the narratives are based on objective data. This supports the database analysis conclusion that contracting professionals are doing a decent job in addressing all performance areas assessed in their objective scores (~81.5%) or in ensuring that the narratives are based on objective data (~77.5%). The interviews indicated that there are significant issues with writing comprehensive narratives. This enhances the database analysis conclusion that contracting professionals seem to have significant problems with writing comprehensive narratives

(~62.5%). The interviews indicated that there are some issues with writing narratives that ensure a contracting layman can understand the work performed, especially with engineering-specific entries. This supports the database analysis conclusion that contracting professionals seem to have significant problems with ensuring that a contracting layman (such as someone who might need to access CPARS data in order to make a decision about a future contract award) can fully understand the work performed (~64.5%).

- What conclusions or recommendations can we draw from the answers to the research questions above?

Lastly, in answering the fifth research question, we can conclude that contracting professionals should get some additional/remedial training on writing robust and comprehensive narratives that the contracting professionals who are accessing these reports are able to fully understand. It may also be beneficial for contracting professionals to get additional training in ensuring that the narratives address all performance areas assessed and in ensuring that the narratives are based on objective data. With the issues outlined in this section, we can also recommend that quality control for those approving the narratives posted to CPARS, as well as those using the data from PPIRS, can be improved by sending unacceptable reports back to the originator for correction. We conclude that there is no further emphasis or training needed in ensuring that the narratives are free of statements to avoid since the data does not show that this is a significant issue.

## **2. Additional Findings**

In the process of completing our research, especially in conducting our interviews, we found several other pieces of information that could be beneficial to the acquisition community with regard to services acquisition that we would like to present here.

**Finding 1:** The information in CPARS/PPIRS is oftentimes not reliable, robust, or comprehensive enough to allow source selection officials to place a

significant enough weight on past performance. This finding was also noted in several GAO and OFPP memorandums mentioned earlier in the literature review chapter of this report. Without reliable, robust, and comprehensive information, it is not possible to properly utilize CPARS/PPIRS in making fair and accurate source selection decisions based on past performance.

**Finding 2:** Unsuccessful contracts tend to have more reliable, robust, and comprehensive past performance information available in their CPARS/PPIRS reports. Source selection decisions should be based on reliable, robust, and comprehensive past performance information for both successful and unsuccessful contracts in order to make fair and accurate award decisions based on past performance.

**Finding 3:** The appropriate amount of weight that should be assigned to past performance in making a source selection should be correlated to the source, availability, quality, and relevancy of the past performance information. Implementing this finding will be difficult because the task of assigning weight to past performance information is normally completed during the acquisition planning phase of the acquisition process. Contractor past performance is normally mined later in the process after the acquisition team has received proposals.

**Finding 4:** PPIRS sometimes contains information in the narratives that is either contradictory or does not quite match up with the objective scores. When the objective scores and narrative sentiment in PPIRS is mismatched, contracting professionals tend to give more weight to the narrative versus the objective scores. When the objective scores and narrative sentiment in PPIRS are mismatched, every effort should be made to send unacceptable reports back to the originator for correction. If this is not possible, the weight assigned to past performance in the source selection decision should be reduced to reflect the fact that there is a contradiction in the report, thereby reducing its reliability.

**Finding 5:** Contractor past performance reports might not be as accessible as they should be in PPIRS because contracting professionals are not always applying due diligence in identifying the appropriate entity using identifying information within the contractor's parent organization. Examples of such identifying information would be an appropriate cage code or DUNS (Dun and Bradstreet Data Universal Numbering System) number. It is imperative that source selection officials are able to access the correct reports for a particular contractor's past performance if they exist. There must be a uniform way of inputting and accessing the correct information in PPIRS if source selection officials are to make fair and reliable award decisions using the past performance information that we have about a particular contractor.

**Finding 6:** Source selection officials often need to solicit contractors for references or ask them to fill out a past performance questionnaire because there is a lack of reliable, robust, and comprehensive past performance information available in PPIRS. The fundamental issue with using past performance information about a contractor that is provided by that contractor is that it will almost certainly only include positive references and omit references where the contractor did not perform well. When this is the only past performance information available to source selection officials, the weight assigned to past performance in the evaluation criteria needs to be reduced to reflect the reduction in the reliability and comprehensiveness of the information.

**Finding 7:** There has been a recent increase in senior-level interest to complete required CPARS reports in a timely manner but not an increased interest in the quality of those reports. The focus needs to be on both the timeliness and quality of the reports. Without quality reports, the information in the report will not be able to be assigned much weight in future source selection decisions and therefore will just be a waste of time for everyone involved in the process.

**Finding 8:** Several of the interviewees made recommendations for improving services acquisition related to contractor past performance



information. The recommendations were to add more analysis tools and performance metrics in PPIRS, better monitor the workload of CORs, better train the workforce on writing CPARS narratives, and better broadcast the findings of CPARS Program Office audits. With improved analysis tools, appropriate workloads for contracting professionals inputting the past performance into CPARS, and a more robust avenue for correcting workforce problem areas, the past performance information in PPIRS will undoubtedly improve and better assist source selection officials in making fair and reliable award decisions.

### **3. Recommendations**

Based on our conclusions, we identified the following eight recommendations.

**Recommendation 1:** Remedial training should be implemented for all members of the acquisition teams that input and utilize past performance information in CPARS and PPIRS. Training should focus on the following areas related to writing comprehensive narratives: ensuring that acquisition team members (i.e., someone who might need to access CPARS data in order to make a decision about a future contract award) can fully understand the work performed, addressing all performance areas assessed in their objective scores, and ensuring that the narratives are based on objective data.

**Recommendation 2:** There needs to be an overall push for higher quality past performance report submissions in CPARS/PPIRS to allow acquisition teams to assign weight to past performance in source selection decisions without having to worry about the source, availability, quality, and relevancy of the past performance information.

**Recommendation 3:** An analysis should be performed on the CPARS/PPIRS database by the program office to ensure that contracting professionals are in fact able to accurately input and retrieve the past performance information on the correct contractor 100% of the time that the information is available.

**Recommendation 4:** A review of the CPARS/PPIRS database by the program office should be conducted to see whether additional analysis tools can be added to better assist contracting professionals in identifying past performance trends for a particular contractor.

**Recommendation 5:** Senior officials at contracting commands should emphasize not only the timeliness of CPARS submissions but also emphasize the quality of those submissions.

**Recommendation 6:** A requirement should be added to the CPARS report card approval and posting process that allows for customer feedback on contractor performance. Agency approving officials should be encouraged or required to collect (either directly or via the COR) and consider input from the customer regarding contractor performance. This will encourage the submission of more accurate and robust CPARS report cards.

**Recommendation 7:** A review of the workload of CORs should be conducted at contracting commands to ensure they have the appropriate amount of time to dedicate to the proper submission of past performance information.

**Recommendation 8:** the CPARS Program Office should look at ways to better broadcast the findings of their audits to help the workforce improve over time.

## **C. AREAS FOR FURTHER RESEARCH**

Additional research would be valuable in several areas to further determine the value of the CPAR narratives for the acquisition process. Obtaining a larger, more diverse, and more recent sample database and redoing the database analysis would add significant insight into how the contract report cards for other types of contracts and for different uniformed services are impacting the acquisition process. Specifically, obtaining a new database that contains contracts for supplies and contracts for different military branches, and comparing CPARS report cards from different agencies would allow for some interesting comparisons that could yield significantly different recommendations for improving the use of past performance information in the acquisition process.

## APPENDIX A. RESULTS OF THE INTER-RATER RELIABILITY TESTING

Rater & Score	Narrative Addresses All Performance Areas Assessed (Yes=1, No=0)	Narrative Based On Objective Data (Yes=1, No=0)	Narrative is Free Of Statements To Avoid (Yes=1, No=0)	Narrative is Robust & Comprehensive (Yes=1, No=0)	Could a Contracting Layman Understand Work Performed (Yes=1, No=0)	Is the Narrative Beneficial Above & Beyond Objective Scores (Score 1-5)	Does the Narrative correlate to Objective Scores Assigned (Score 1-5)
Rater #1	1	1	1	0	1	2	3
Rater #2	1	1	1	1	1	3	5
Rater #3	1	0	1	1	1	3	3
Score	3	1	3	1	3	3	1
Rater #1	1	1	1	0	1	2	3
Rater #2	1	1	1	0	1	2	5
Rater #3	1	1	1	0	1	1	3
Score	3	3	3	3	3	3	1
Rater #1	1	1	1	0	1	2	3
Rater #2	1	1	1	1	1	3	5
Rater #3	1	0	1	0	1	1	3
Score	3	1	3	1	3	2	1
Rater #1	1	1	0	1	1	4	3
Rater #2	1	1	0	1	1	4	5
Rater #3	1	1	0	1	1	5	4
Score	3	3	3	3	3	3	2
Rater #1	0	1	1	1	1	5	4
Rater #2	0	1	1	1	1	3	5
Rater #3	0	1	1	0	1	4	4
Score	3	3	3	1	3	2	3
Rater #1	1	1	1	1	0	3	5
Rater #2	1	1	1	1	0	3	5
Rater #3	1	1	1	1	0	3	5
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	1	1	5	5
Rater #2	1	1	1	1	1	4	3
Rater #3	1	1	1	1	1	4	4
Score	3	3	3	3	3	3	2
Rater #1	1	1	1	1	0	5	5
Rater #2	1	1	1	1	0	4	4
Rater #3	1	1	1	1	1	5	5
Score	3	3	3	3	1	3	3
Rater #1	0	1	1	1	0	4	3
Rater #2	0	1	1	1	0	4	2
Rater #3	0	0	1	0	0	4	2
Score	3	1	3	1	3	3	3
Rater #1	1	1	1	0	1	2	3
Rater #2	1	1	0	0	1	1	2
Rater #3	1	1	1	0	1	3	3
Score	3	3	1	3	3	2	3
Rater #1	1	1	0	0	1	2	3
Rater #2	1	1	0	1	1	2	3
Rater #3	1	1	0	0	1	2	4

Rater & Score	Narrative Addresses All Performance Areas Assessed (Yes=1, No=0)	Narrative Based On Objective Data (Yes=1, No=0)	Narrative is Free Of Statements To Avoid (Yes=1, No=0)	Narrative is Robust & Comprehensive (Yes=1, No=0)	Could a Contracting Layman Understand Work Performed (Yes=1, No=0)	Is the Narrative Beneficial Above & Beyond Objective Scores (Score 1-5)	Does the Narrative correlate to Objective Scores Assigned (Score 1-5)
Score	3	3	3	1	3	3	3
Rater #1	1	1	1	1	1	3	4
Rater #2	1	1	1	1	1	3	4
Rater #3	1	1	1	0	1	2	4
Score	3	3	3	1	3	3	3
Rater #1	1	1	1	0	1	2	3
Rater #2	1	0	1	0	1	2	3
Rater #3	1	1	1	0	1	1	4
Score	3	1	3	3	3	3	3
Rater #1	1	1	1	1	1	5	3
Rater #2	1	1	1	1	1	4	3
Rater #3	1	1	1	1	1	3	3
Score	3	3	3	3	3	2	3
Rater #1	1	0	1	0	1	2	3
Rater #2	1	0	1	0	1	2	4
Rater #3	1	0	1	0	1	1	4
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	1	0	4	4
Rater #2	1	1	1	1	0	4	1
Rater #3	1	1	1	1	0	3	3
Score	3	3	3	3	3	3	1
Rater #1	1	1	1	0	0	3	3
Rater #2	1	1	1	1	0	3	2
Rater #3	1	1	1	1	0	3	3
Score	3	3	3	1	3	3	3
Rater #1	1	1	1	0	1	2	3
Rater #2	1	1	1	0	1	2	5
Rater #3	1	1	1	1	1	3	5
Score	3	3	3	1	3	3	2
Rater #1	0	0	1	0	1	1	1
Rater #2	0	0	1	0	1	1	2
Rater #3	0	0	1	0	1	1	1
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	1	1	3	4
Rater #2	1	1	1	1	1	3	4
Rater #3	1	1	1	1	1	3	4
Score	3	3	3	3	3	3	3
Rater #1	1	0	1	0	0	1	4
Rater #2	1	0	1	0	0	2	5
Rater #3	1	1	1	0	0	1	4
Score	3	1	3	3	3	3	3
Rater #1	1	0	1	0	1	1	4
Rater #2	1	0	1	0	1	1	5
Rater #3	1	0	1	0	1	1	5
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	0	1	3	3
Rater #2	1	0	1	0	1	2	5
Rater #3	1	0	1	0	1	3	3

Rater & Score	Narrative Addresses All Performance Areas Assessed (Yes=1, No=0)	Narrative Based On Objective Data (Yes=1, No=0)	Narrative is Free Of Statements To Avoid (Yes=1, No=0)	Narrative is Robust & Comprehensive (Yes=1, No=0)	Could a Contracting Layman Understand Work Performed (Yes=1, No=0)	Is the Narrative Beneficial Above & Beyond Objective Scores (Score 1-5)	Does the Narrative correlate to Objective Scores Assigned (Score 1-5)
Score	3	1	3	3	3	3	1
Rater #1	1	0	1	0	1	2	3
Rater #2	1	0	1	0	1	2	5
Rater #3	1	0	1	0	1	3	4
Score	3	3	3	3	3	3	2
Rater #1	1	1	0	1	1	3	4
Rater #2	1	1	0	1	1	5	5
Rater #3	1	1	0	1	1	4	5
Score	3	3	3	3	3	2	3
Rater #1	1	1	1	1	1	5	5
Rater #2	1	1	1	1	1	4	5
Rater #3	1	1	1	0	0	3	4
Score	3	3	3	1	1	2	3
Rater #1	1	1	1	1	1	4	3
Rater #2	1	1	1	1	1	5	4
Rater #3	1	1	1	1	1	4	4
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	1	0	3	2
Rater #2	1	1	1	1	0	4	3
Rater #3	1	1	1	1	0	4	2
Score	3	3	3	3	3	3	3
Rater #1	1	1	1	0	0	2	3
Rater #2	1	0	1	0	1	2	5
Rater #3	1	0	1	0	0	2	3
Score	3	1	3	3	1	3	1
Rater #1	1	0	0	0	0	1	2
Rater #2	1	0	0	0	1	2	5
Rater #3	1	0	0	0	0	3	4
Score	3	3	3	3	1	2	1
Agreeability	100	0.8444444444	0.9777777777	0.8	0.9111111111	0.9333333333	0.8

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## APPENDIX B. SPECIFIC EXAMPLES OF NARRATIVE STATEMENTS TO AVOID

### FROM THE CPAR QUALITY CHECKLIST

#### Block 20: Sample Narrative Statements to Avoid

The Contractor's performance in this area was exemplary. They were proactive in satisfying Electrical Kit Product Performance requirements. They produced a superior product for the customer. In many instances, they performed engineering tasks **outside the scope of the contract**.

**"Outside the scope of the contract"** – This phrase should not be in a CPAR narrative. It implies that the Contractor performed work not legally required and is eligible for an equitable adjustment to the contract. An equitable adjustment means that the program office/customer will have to come up with additional funds to pay for the additional tasks.

**In our opinion**, the Contractor's performance in the systems engineering area was very poor. Kit hardware deficiencies were observed and it **appeared** that the Contractor lacked systems engineering knowledge and expertise. **We believe** that some of the contractual kit requirements will not be met. **It is our hope** that additional factory testing will eliminate these hardware deficiencies. If management had responded in a timely manner, the requirement might have been satisfied. Additionally, **we were not happy** with the initial factory testing, and **did not like** their "fly and fix" philosophy of testing.

**"In our opinion"** – This is a subjective phrase which gives the impression that there is no firm evidence to prove poor performance.

**"Appeared"** – This is a speculative remark which does not prove that they lacked systems engineering knowledge.

**"We believe"** – This is also a speculative remark. It does not prove that they did not satisfy some kit requirements.

**"It is our hope"** – This statement does not belong in a CPAR narrative. The issue is whether the Contractor will correct the deficiencies using factory testing. If so, the narrative should indicate the pending corrections. If not, justification should be provided as to why the factory testing failed to correct the problems.

**"We were not happy"** – This is an emotional and subjective statement which should be avoided. The CPAR should reflect justification for the successes/failures from the factory test.

**"We did not like"** – The customer should evaluate the results of the fly and fix tests in detail, not their testing technique.

The Contractor was late in delivering all of the 100 electric kits. **We think** that one reason is that their systems engineering effort was poor due to several electrical component deficiencies. Another reason **could be** that their ability to manage the electrical subcontracts left much to be desired. We established a 6 month extension to the contract. **We hope** they can deliver the 100 kits without significant discrepancies.

**"We think"** – This phrase implies that the customer has not proven the Contractor's poor performance with evidence.

**"Could be"** – This phrase indicates that the customer is not sure that the reason for the deficiencies is poor management. There is no proof of poor management here.

**"We hope"** – This phrase implies that the delivery of the kits without deficiencies in the time period allotted is a desire, not a contractual requirement.

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## APPENDIX C. AN EXAMPLE OF AN INSUFFICIENT NARRATIVE VERSUS. A BETTER WAY TO WRITE THIS

### TAKEN FROM THE CPAR QUALITY CHECKLIST

#### **Block 20: Sample CPAR Narrative**

##### **Insufficient Narrative:**

Schedule: Very Good - In our opinion, the Contractor has done really well in terms of schedule. The Training Manager, Jack Jones, is pleasant and easy to work with. He adapts to our schedule changes amazingly and never complains. He also went above and beyond and fixed our printer and fax without charging the Government and he continued to meet all the contract objectives in the interim. Great job!

The example above is missing detail to support the score and supporting documentation and metrics. In addition, it uses an individual's name, addresses work outside the contract scope, and uses subjective phrases.

##### **A Better Way to Write This:**

Schedule: Very Good - Contractor successfully executed the delivery and training requirements for this period ahead of schedule. For example, there were 20 training site visits scheduled for this period however, the Contractor conducted 31 visits in the same period of time. The Contractor also met 100% of the 13 contract data requirements in a 45 day timeframe versus the 60 days allotted. This resulted in data requirements 14-20 being completed earlier than anticipated. This was done with minimal supervision by the program office hence allowing more time for additional projects. A 20 site preventative maintenance visit ran behind schedule for the first 8 months of the reporting period due to equipment failures, but Contractor management was able to bring the visit back on schedule due to implementation of an aggressive quality management system and spares availability policy.

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## **APPENDIX D. INTERVIEW QUESTIONS FOR DOD CONTRACTING PROFESSIONALS**

### **INTERVIEW INTRODUCTION**

*The following section will be read verbatim to each interview subject in order to explain to them the purpose of the interview and to ask their permission to perform the interview.*

#### **Project Title:**

Determining the Value of Performance Evaluation Narratives for Service Contracts

#### **Purpose of Interview:**

We are three graduate students enrolled in the Acquisition and Contract Management Curriculum at the Naval Postgraduate School. After graduating, we will be working in the contracting field for the Department of Defense. We are conducting research in an effort to determine the value of contractor performance assessment report narratives for services contracts. In Department of Defense, members of the acquisition team submit contractor past performance information to Contractor Performance Assessment Reporting System (CPARS). This information includes objective (numeric) scores for contractor performance in five categories as well as a written narrative. Contracting professionals and source selection team members are able to retrieve contractor past performance information that was submitted to CPARS through the Past Performance Information Retrieval System (PPIRS).

We have studied and conducted statistical analysis on CPARS contractor past performance narratives and how they relate to their associated objective scores. As part of this research, we would like to ask for your assistance by allowing us to interview you. The purpose of the interview is to obtain data about how and to what extent you use the objective scores and narratives when reviewing CPARS (or PPIRS) report cards for source selection and contract

administration. This interview data, combined with a statistical analysis of narratives and objectives scores, should allow us to make recommendations for improving services acquisition and streamlining the way contracting professionals submit to and utilize these systems. Our goal is to make these programs more useful to you, the contracting professional, as well as easier to use, if there is any improvement to be had.

Your command and department head have invited us here, upon our request, to conduct this interview and you have been selected by them to be a potential interviewee based on your role and experience as a contracting professional. Participation in the interview is voluntary and anonymous. Your responses to our questions will not be able to be traced back to you or your command and they will not be reported to your supervisors or chain-of-command. This interview consists of 13 questions and should take about 30 minutes to complete.

Do you agree to assist us in conducting this research by allowing us to interview you?

#### **Goal of the Interview:**

*The previous section **Purpose of Interview** was formulated with the following goals in mind:*

- *Brevity. We do not want the subjects to lose interest before the interview begins.*
- *Clarity. This introduction to our research is concise and detailed enough to be readily understood by a contracting professional with enough knowledge of the subject matter to be useful in our research.*
- *Unbiased. We do not want to show whether we believe contractor past performance objective scores have any more or less value than the associated narratives. We do not want to specify whether there is in fact any way to improve upon the CPARS/PPIRS programs. In an effort to avoid encouraging a self-serving bias in interview subjects we do not want to specify that submitting contractor past performance information to CPARS is directed by*

*Department of Defense. We want to get them to answer questions honestly without concern that they might not have been closely following protocol.*

- *Encouraging. We want to identify with our subjects as fellow government contracting professionals which a mutual interest in improving our processes and systems. We want to encourage them to agree to the interview and to be forthcoming because in doing so they might help all of us in the future.*
- *Non-retribution. Subjects should be clear on the fact that there will be no way that this interview can come back to hurt them and that their identities will be completely protected. Interviews are completely voluntary and encouraged by the interviewee's command.*

## **INTERVIEW QUESTIONS**

**How often do you use contractor past performance information for source selections?**

### ***[Provide Verbal Categories of Options for Answers]***

*This question allows us to approximate the level of depth of familiarity the subject has with contractor past performance information in general and specifically whether he or she participates in contract source selections. This question is carefully worded in order to avoid asking alternative questions such as: How often do you access PPIRS? What portion of the time, when conducting source selection, do you use contractor past performance information? We want to know specifically how many times in a given period they use contractor past performance information for source selection in order to determine the subject's depth of experience and to determine to what extent contractor past performance information is used as compared to how frequently it is used during contract administration.*

*In order to help the subject understand the question we will provide examples of potential answers, carefully in order to avoid injecting bias, such as: once a year, or several times a day. Using examples on the extreme ends of the range will keep from planting a likely answer in the mind of the subject.*

**How often do you use contractor past performance information for contract administration?**

***[Provide Verbal Categories of Options for Answers]***

*This question is the same as the previous question but for contract administration instead of source selection. The purposes of this question are the same as with the previous question except for isolating contract administration from source selection. We do not believe it would be sufficient to ask one question: How often do you use contractor past performance information for contract administration and/or source selection? For the purposes of the research we want to know to what extent it is used for each specific purpose.*

**When inputting past performance data into CPARS, what is the typical amount of time spent per contract gathering information and inputting it into the system?**

*There is some purposeful ambiguity in this question. Some contracting professionals write the entire narrative for one CPARS report card while in other cases, especially for large and complex acquisition, the task is shared by up to several members of the acquisition team. We want to allow the interview subject to specify how much time is spent per contract gathering and inputting information whether or not all of the effort was conducted by the interviewee. This may require that the subject make some estimates of how much time other individuals are spending on this task.*

**Does this amount of time vary greatly or is it usually around the typical amount of time?**

*The purpose of this question is to establish whether there is a lot of variability in the amount of time one spends putting together a CPARS submission. If there is not much variability then the follow up question would be to determine whether there is much variability in the complexity of the contracts the subject handles. If there is a lot of variability, we want to determine whether the variability is based primarily on the size and complexity contracts. We clarify*

*the impact of the data from the previous question with one of the two following questions.*

**[ask the following question if subject responded with answer more similar to “the amount of time is usually around the typical amount of time”]**

**Are the contracts you write or administer usually relatively similar in size and complexity or do they tend to vary greatly?**

**[ask the following question if subject responded with answer more similar to “the amount of time varies greatly”]**

**Do you typically find that gathering and submitting information to CPARS takes more time for larger more complex contracts or do you find that the amount of time varies not related to the size and complexity of the contract?**

*Subjects will answer one of the two previous questions.*

**Typically, what portion of the total time it takes to prepare and submit a CPARS report is spent preparing and writing the narrative portion of it?**

*The purpose of this question is to determine what portion of their time is spent preparing the narrative which will be one of the evaluation factors considered when determining the relative value of the narrative. Our evaluation will compare the relative value of the narratives to the relative amount of effort it takes to create them.*

**What is the typical number of people involved per contract in entering contractor past performance information into CPARS?**

*The purpose of this question is to tell us the typical size of the acquisition team. This provides us data useful in analyzing the CPARS written narratives. Some narratives are very uniform throughout their sections in terms of positive or negative sentiment, while others have much more variation. Some CPARS*

*written narratives are written by one individual while others are written in parts by several. Useful data will show whether it is much more or much less likely that an individual written narrative was written by one person than more than one person.*

***[Ask the following question if the answer to the previous question was greater than one]***

**Which members of the acquisition team (contracting officer, COR, program manager, requirements manager, etc.) are responsible for entering past performance information into CPARS?**

*The purpose of this question is to determine specifically which members of the acquisition team are most likely to participate in the writing of a CPARS narrative.*

**When you are conducting a source selection or administering a contract does contractor past performance information have any impact?**

*The purpose of this question is to determine to what extent, in general, the interview subject values contractor past performance information. In this case, we feel that combining source selection and contract administration will provide adequately specific and useful data for our research purposes. The question is specifically worded to avoid injecting bias and will apply to all interview subjects irrespective of answers to previous interview questions. If the interview subject answers in the negative then there is no need for a follow-on question.*

**[If answer to previous question was in the affirmative, ask the following question]**

**To what extent does contractor past performance information impact your source selection or contract administration?**

*The purpose of this question is to determine the value of CPARS/PPIRS to the individual contracting professional. Contracting officers and source*



*selection teams are allowed by the Federal Acquisition Regulation (FAR) to use some subjectivity in determining how much to consider contractor past performance. Knowing how much they value the product will aid us in determining whether improvements to the system might be beneficial and whether the quality of the system affects how much value is assigned to it.*

**Which provides more impact, the objective scores or the narratives?**

*The purpose of this question is to compare the two sections of the CPARS Report Card in terms of value to the contracting professional. This question is carefully worded to that it is a zero sum value pool split between the two sections. We are not asking how much total value each section provides independent of each other.*

**What ideas do you think would increase the impact of contractor past performance information in source selection and/or contract administration?**

*The purpose of this question is to get opinions from the interview subject. Since evaluating past performance information is mandated by the FAR, our research is attempting to find ways in which CPARS/PPIRS can be made more user-friendly and responsive for this purpose. Opinions from experts in the field will be very useful.*

**Do you feel that past performance information is weighted appropriately in source selection?**

*The purpose of this question is to determine whether the interview subject believes that the FAR or their agency puts too much or too little emphasis on contractor past performance. If the interview subject believes there is too much emphasis on past performance, it might be because the CPARS/PPIRS systems are insufficient for providing useful information. This question was worded to avoid the injection of bias. The data obtained from the answers to this question will be particularly useful when combined with the information from the other answers received.*

**Do you find that the narrative usually provides useful information above and beyond the objective scores?**

*The purpose of this question is to determine whether the CPARS narrative section has value whether or not the objective scores have more value than the narrative. It is possible that the interview subject will answer yes even if he or she answered to a previous question that the objective scores are more impactful than the narrative.*

**If the objective scores of past performance information were to be eliminated, how would that impact the source selection or contract administration process?**

*The purpose of this question is to establish the absolute value of the CPARS objective scores. It allows the interview subject the opportunity to give a bottom line answer to the question: How much does this really matter? The answers to this question are going to be particularly useful when compared to answers to previous interview questions. If the interviewee finds that the narrative section is much more impactful than the objective scores then the conclusion will be far different than if the opposite is true.*

**If the narrative portion of past performance information were to be eliminated, how would that impact the source selection or contract administration process?**

*The purpose of this question is the same as the previous question except for the narrative portion of the CPARS Report Card.*

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